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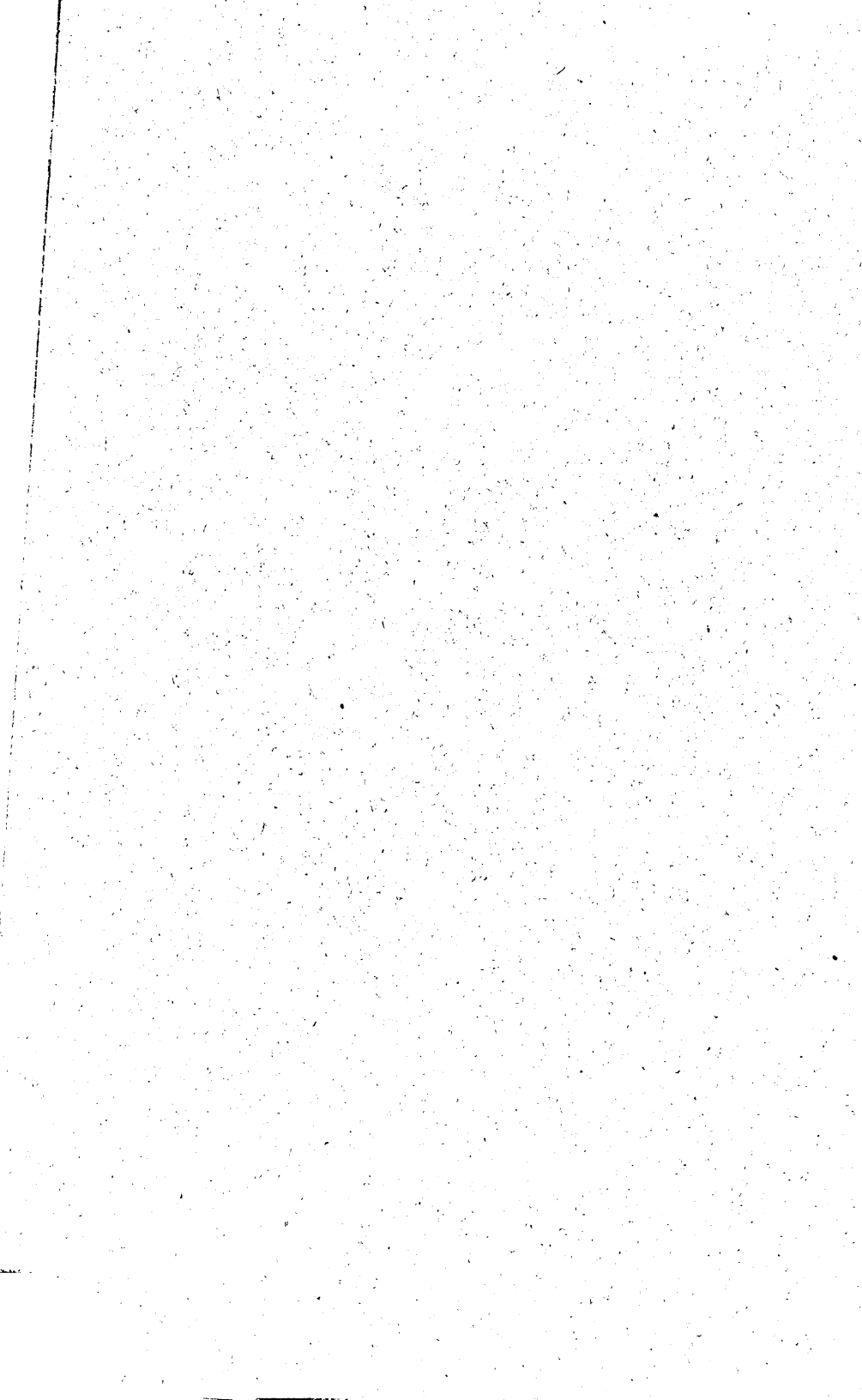
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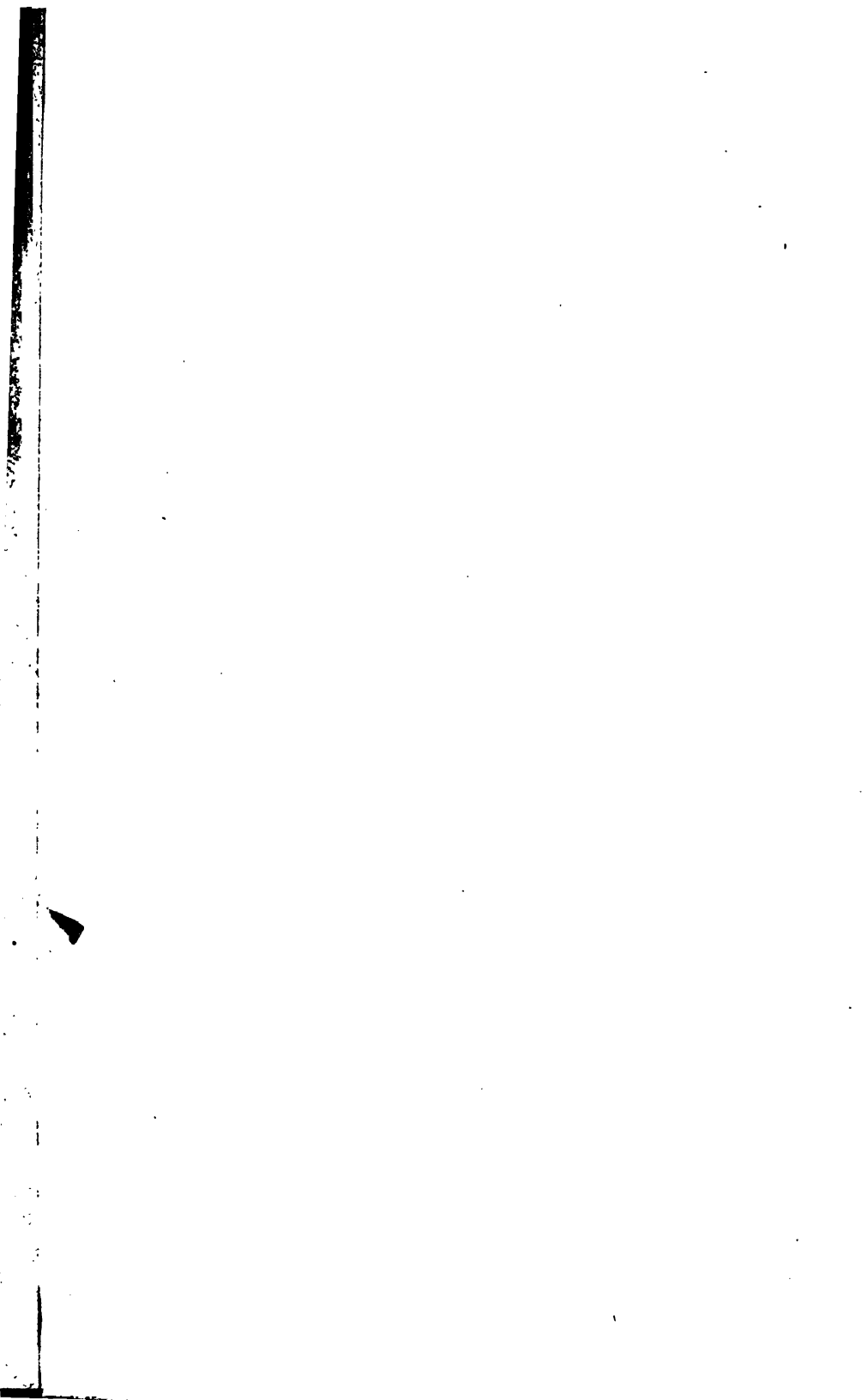
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SUPPLEMENT

TO THE

18369

Journal of *Materia Medica.*

CONTAINING A BRIEF SUMMARY OF

THE ACTION AND USES OF THE PRINCIPAL ARTICLES OF THE

MATERIA MEDICA,

INCLUDING THEIR DOSES, MOST IMPORTANT CONTRA-INDICATIONS, INCOMPATIBLES
AND ANTIDOTES,

TOGETHER WITH THE

Analyses of the Principal Mineral Waters of

EUROPE AND THE UNITED STATES

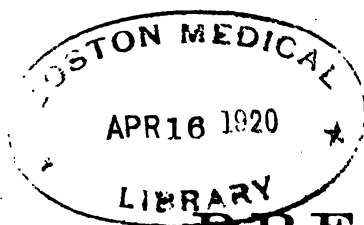
AND

FORMULÆ FOR DIETETIC PREPARATIONS, &c.

NEW LEBANON, N. Y.,

PUBLISHED BY TILDEN & COMPANY.

1874.



P R E F A C E .

Owing to an insufficient supply of back numbers of the *Journal of Materia Medica* to meet the demands of the many enquiries concerning particular articles which have been referred to at length in it, and for the purpose of conveying the information so often solicited in regard to our medicinal preparations in general, we issue this publication, as a Supplement, appending many tables desirable and valuable to the profession.

The first edition was published some two years ago, since which time we have added largely to our catalogue of medicines, and we now present the profession a carefully revised and enlarged edition. We have purposed to have it contain a comprehensive summary of the action and uses of all our various drugs, simple and compound, and in every grade of combination; and they comprise a large class of the most approved agents in the materia medica, the most popular as well as efficient instruments for combating disease, including, also, several combinations and valuable medicines, which are as yet comparatively new, but whose promptness of action and agreeableness, in a word, whose remedial and practical utility have been so highly recommended as to give them a prominent place among therapeutical agents. We have also stated the dose of each article, and when deemed important, the most palpable contra-indications, incompatibles, and antidotes. Our prime object has been to place before the physician's eye the varied medicinal application of each remedy, and to reduce to the smallest possible bulk.

Perhaps there has been no time since we began the publication of the *Journal of Materia Medica* when it was more sought for or read than at present. The inducements which exist under the present state of affairs for the debasement of medical substances generally demand increased care on the part of dealers in medicines, as well as on the part of the Profession great discrimination against deception and fraud, more particularly in their preparation, into which enter materials of high cost, and which are frequently offered at a cost less than the material can be purchased for.

A recent article in the Druggists' Circular and Chemical Gazette and New York Medical Journal, bearing particularly upon these points, being of interest to the Profession, we give entire :

"It is curious to compare the prices current as issued by the various manufacturers of what, in contradistinction to Chemicals, are called Pharmaceuticals. Take, for instance, the class of Fluid Extracts, one list before us quotes Fluid Extract of Sarsaparilla (Comp.) at \$2.85 per lb.; another quotes the same at \$1.25. One quotes Fluid Extract of Buchu at \$3.25, another the same at \$1.25, and so on, the prices varying from twice to three times as much on one list as another. Now, a fluid extract, according to every acknowledged authority, is made, with a very few well-known exceptions, of such strength that for every troy ounce of the drug there must be just a fluid ounce of the Fluid Extract. This is the strength prescribed by the U. S. Pharmacopœia, and that which of course forms the basis of their employment in the treatment of disease, and especially in making the other preparations of the same drug. Where a troy ounce of a drug is used in making a pint of its syrup, a fluid ounce of its fluid extract added to fifteen fluid ounces of simple syrup, would be expected to furnish a pint of syrup of corresponding strength. So simple and easy is this method of preparing the weaker liquid preparations used in medicine, that it is now very much resorted to by Pharmacutists and Physicians, and is recognized in several instances in the Pharmacopœia. What, then, is the reason that Fluid Extracts differ so greatly in price from different makers? Is it because some possess facilities for making them so much cheaper than others, or must we look for other causes? This, we think, can be answered conclusively thus:—Throwing out of view the exact processes laid down in the Pharmacopœia, to which some manufacturers conscientiously adhere, there are only two considerations which can materially affect the economy of extraction of drugs—these are the completeness of the means of pressure and of the recovery of the excess of alcohol employed. At the present enormous cost of alcohol it is essential that not a drop shall be wasted to secure an economical result; hence most skillful percolation must be resorted to, connected with pressure for securing every drop of the percolate, and then well adjusted apparatus for distillation must be used in concentrating the liquid. These requirements are met, perhaps, by all the leading manufacturers, and yet this great disparity in prices. The true reason is, undoubtedly, that some few manufacturers make these preparations of full strength, while the majority wholly ignore the standards of the Pharmacopœia, and sell preparations of just such strength as suits themselves. We

will not ask whether this is justifiable on the professional ethics, but we put it to the reader whether it is dealing justly toward that very large class of purchasers who are led by names, with very little knowledge as to the real merits of a preparation. If a fluid extract may represent one-fourth its weight of a drug, or may be equal to its own weight, according to the whim of the maker, what value can it have in any rational scheme of medicine? As to the interest of the purchaser, it evidently lies in this, as in all other cases, in getting the best. If a man will ignore the standards of good practice in his manipulations, what confidence can one have in his fairness in business transactions? On the other hand, inflexible honesty in manufacturing indicates a similar principle in dealing. We should not think it necessary to go over these obvious points, but for the purpose of calling attention to an invariable rule which may be applied to these price currents. When a Fluid Extract is offered at a given price, let the buyer count up the cost of the drug, remembering that a pint will take sixteen troy ounces (equal to a commercial pound and two ounces), with the menstruum, almost always alcoholic, and which by every process is liable to some waste, and the sum of these items will be the minimum cost of the preparations. To get at the fair selling price, a margin must be added for fuel and labor, and a profit of not less than twenty per cent to the manufacturer. If the price quoted falls much below this, depend upon it, there is a deficiency somewhere, and the apparent cheapness does not imply economy to the purchaser."

The results of Competition in the manufacture of medicines frequently leads on to a kind of rivalry which can only be sustained by low prices and adulteration. Pure remedies *can not* be sold for the same as impure ones. Those who offer medicines at reduced prices make their profits by adding often worthless articles, or articles that chemically change the action and power of remedies to such an extent that disappointment must necessarily follow their exhibition. The character of the manufacturer must secure character for his preparations. *The profession should obtain a better and more critical knowledge of the various manufacturers, that due weight may be given to the names associated with the preparations they use, and should then be more careful to observe that the authenticated label of the manufacturer is affixed.* The dishonest manufacturer, no less than the itinerant doctor, the quack or charlatan, is an imposter. Both by a system of false assurances often obtain possession of the business which legitimately and humanely belongs to the man of science and honest purposes.

The price of Medicines should be a minor consideration with the

physician. His dominant object should be to obtain pure drugs, and such *can not* be obtained at the low prices quoted by some manufacturers, as the crude articles themselves actually often cost more than the preparations do after they have passed through the expensive manipulations and processes of the laboratory. Yet it is not unfrequently the case that physicians are startled at the apparent difference in the price, and are influenced too much in their decision in favor of the cheap articles, forgetting that they may not only be entirely worthless, but that the effects of the uncertainty and bad quality of these substances are transmitted directly to the practice of medicine, and in failing to fulfill the indications to their use they not only bring distrust and discredit upon both the science and art of medicine, but also tend directly to foster and uphold the quackeries and nostrums of the day in many ways; forgetting that perhaps one-fourth the quantity of the best preparation would answer their purpose at a *less actual cost*, and at the same time would promote their reputation for success and skill.

On the purity of Medicines are pending numerous and important issues, such as affect the success and reputation of the physician, the interest of his patients, the mitigation and cure of disease, the hope and expectation of anxious friends, and even in many instances life itself. Every medicinal agent used for the mitigation or cure of disease should be given *free from any adulteration*. This subject presents a common interest for the contemplation of the profession. Much of a physician's success in obtaining and retaining a practice must, necessarily, depend upon the purity of the agents he employs. If they are spurious, in consequence of which the action and power are deficient, the practitioner must be disappointed in the treatment of maladies, and the result will almost invariably be that the patient and friends will be disappointed in the medical attendant, and he will be discharged and another called to administer in his stead.

The effects of impure drugs are not limited to the physician and his confiding patrons, or even his patients' friends. Communities have an interest at stake, and the circumstances may be such that the doctor may have a public verdict against him, and his reputation, however good, however meritorious and hard-earned, destroyed simply by the exhibition of adulterated medicines.

There are other issues pending, such as protracted disease and increased sufferings, and the loss of life plainly to be attributed to this sole cause. The laws of our land are framed for the punishment of fraud and its suppression, but no law has yet been passed adequate to suppress this alarming and increasing one, the adulteration of medicines.

A counterfeit currency has laws for its prohibition, and punishment of the offending parties, but this is not the case with spurious or fictitious drugs. And yet the man, who stands *convicted* for making and passing counterfeit money, has not committed a crime that should be mentioned in relation to its guilt and moral turpitude, when contrasted with that of manufacturing and vending impure medicines. The former has aimed only to defraud in money—the latter not only takes your money but protracts the sufferings of disease that finally end in premature dissolution.

As health constitutes the crowning blessing of life, without which wealth, applause, and fame sink into absolute insignificance; so that system of deception that aims directly or indirectly at the destruction of the citadel of health may in all truth be said to constitute the "*ne plus ultra*" of fraudulent transactions, and to merit a general rebuke. This is a matter that comes home to us all. There is no one of us who can claim exemption from the evils growing out of the deterioration and debasement of medical substances.

Every plant in the *materia medica* possesses some specific or general medicinal principle upon which its value, as a therapeutic agent, depends. The various forms in which medicines are prepared give evidence of difference of opinion in regard to the most appropriate and effective mode of administering them, and no one class of pharmaceutical preparations can be used exclusively in medical practice to the rejection of all others. Their remedial properties are due to some one or more active principles. The preservation and presentation of these, in an unaltered state, in all preparations, should be the aim and purpose of the manipulator. The processes by which they are obtained, preserved and made available to fulfill the conditions of their administration, are important points of consideration to the medical practitioner.

The substance or crude material should in all cases be analyzed, and its relation to a standard quality ascertained, because it is a well ascertained fact that plants grown in different localities, upon moist or dry soils, lowlands or uplands, or collected early or late in the season, vary in their proximate principles.

To overcome these contingencies as far as possible, we cultivate extensively the most important plants. By the analysis of a particular article, and the soil upon which it is proposed to grow it, the nutriment necessary to its perfect development is determined. Principal among these are the narcotics, as hyoscyamus, belladonna, stramonium, digitalis, &c. All these are limited to a certain state or condition of growth

for manufacturing purposes, and are used in the recent state. As many of the principles of plants are of a volatile and delicate nature, readily injured by heat, causing a conversion of fixed soluble principles into insoluble and inert compounds, we early adopted the process of evaporation at a low temperature in receivers from which the air is exhausted by an air pump.

SOLID OR PILULAR EXTRACTS should represent all the active medicinal principles of the plant from whence they are derived. These may be an alkaloid, resinoid, acid, volatile or fixed oil, oleo-resin, or a neutral principle, (without acid or alkaline reaction), separate or combined, and should be preserved in their natural relations, so that the therapeutical effect shall be the same as the crude material. By an accurate analysis of the plant, the menstruum and manipulation can be adapted to the peculiar characteristics of its active constituents, and their preservation by evaporation in a vacuum rendered more certainly than by any other known process. They may be of the pilular consistence, or by further drying, brought to a powdered state, and in that form present all the active *medicinal or positive medical* constituents of the plant in a very concentrated form.

Inferior or sophisticated preparations consist chiefly in the employment of crude materials rejected as unfit for any other purpose, either old or worm eaten—the admixture of gum and starch to give the required consistence, or keep up the general average of production, or as one of many instances, the use of cichorium intybus for leontodon taraxacum, or solanum nigrum for atropa belladonna.

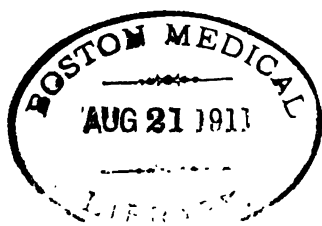
FLUID EXTRACTS vary from the preceding class in degree of concentration. The general principles observed in their preparation are the same, but the process by which the medicinal properties of the plant are exhibited in the fluid form, admits of the preparation being made of any required standard of strength, definite and uniform as regards the amount of active medicinal principles represented by any given quantity, held in solution so as to form clear preparations. Conceding *fluid extracts* to be made from materials of *standard quality*, and by processes calculated to exhibit the activity of the plant, they meet the requirements of the practitioner by supplying a strength of preparation intermediate between the solid extract and the tincture—avoid the unnecessary bulk of infusions—the uncertainty of decoctions—the stimulation modifying the therapeutical action of many tinctures—are with great facility taken into the system, requiring little or no digestion—act as soon as administered, and when immediate effect of medicine is desired.

are the best forms in which it can be employed. The physician is enabled to regulate the dose with greater ease and certainty, and for convenience in calculating doses, they are generally made of the strength of one pound of the drug to one pint of fluid—are capable of ready combination, or of converting into tinctures, syrups and infusions for purposes of further combination.

ALKALOIDS AND RESINOIDS.—They purport to be the active principles of the plants, and have the same relation to the plants whence they are derived, that quinia does to the cinchonas, and morphia to opium. The alkaloids possess all and the same properties with the mineral alkalies; they crystalize, turn red, blue litmus paper, and combining with acids form perfectly defined salts. The discovery of these principles, ordinarily designated resinoids, is more recent, and only up to a certain point do they possess the peculiar characteristics of *resins*. Jalapin forms an exception. Many of these agents, styled indifferently alkaloids or resinoids, do not present any marked acid or alkaline characteristics, such as *piperine*, *asparagine*, *glycyrrhizine*, &c. These substances are more numerous than the resins, properly so-called.

It is often necessary when these principles have been reduced, to combine with them sugar of milk or the powder of the same drug, to secure an impalpable powder, because they are often oleaginous in their character. This fact, when it occurs, is distinctly stated upon the bottle, and the quantity always increased in proportion to the admixture, that each bottle shall contain one ounce of the active principle.

These agents are subject to much adulteration; but the tests are simple and easy. *Concentrated preparations proper*, or *alkaloid and resinoids*, should be carefully distinguished from the *alcoholic and hydroalcoholic extracts, dried and powdered*, of which large quantities are being made and sold for them. However convenient and valuable they may be *as a class*, they are preparations which should be sold at only a small advance from the cost of the solid extracts; and it is due to the physician that he understands definitely whether he is administering the medicinal principles of a drug in an isolated form, or in the form of a powdered solid extract—at the same time he should not be charged the price of the former while dispensing the latter.



SUPPLEMENT

TO THE

Journal of Materia Medica.

Aconitum Napellus.

(*Aconite.*)

THE aconite is undoubtedly one of the most powerful and reliable of the acro-narcotics. Its action on the nervous system in medicinal doses is that of a direct sedative. It differs from opium and its preparations, in being more concentrated and uniform in its action and possesses another advantage in its freedom from any tendency to unduly excite the nervous system, or to produce constipation. Aconite gives good results in almost the entire range of neuralgic affections, and in those obscure complications of rheumatism and neuralgia, in which there is freedom from local or constitutional trouble, independent of the nervous derangement. It is much employed in the treatment of gout, scrofula, secondary syphilis, scirrhus and certain cutaneous diseases, amaurosis, paralysis, epilepsy, intermittent fevers, diseases of the heart, in inflammation of the brain and its meninges, of the throat, of the lungs and pleura, peritoneum, intestinal mucous membrane, whether attended with dysentery or diarrhea, in erysipelas, acute corneitis and conjunctivitis, &c. Dr. Preston says: "I have used it for five years, during which time I have repeatedly exhibited it in various neuralgia, and other neuropathic diseases, and have yet to find a case it did not cure." Dr. Stewart, of Peekskill, N. Y., writes: "In acute rheumatism it is a valuable remedy given in conjunction with vin. colch. sem., in the dose of five minims of the former to half a dram of the latter. It is almost my main reliance in that disease." It should be administered with caution,

and for greater accuracy the fluid extract should be diluted. See Journal of Materia Medica, Nov. 1866.

Contra-indications. — Chlorotic, anæmic and paralytic affections. Great depression of nervous energy and brain, of the vital powers. Hemorrhagic irritability and feebleness of the circulation. Mechanical impediment to the passage of the blood, particularly through the heart and lungs.

PREPARATIONS.

Fluid Extract Leaves.....	Dose, 2 to 4 drops.
“ “ Root.....	“ 1 to 3 “
Solid “.....	“ $\frac{1}{2}$ to 1 grain.
Pills, $\frac{1}{2}$ grain.....	“ 1 to 4.
“ $\frac{1}{2}$ “.....	“ 1 to 2.
“ 1 “.....	“ 1 to 2.
“ of Aconitine, 1-60 part of a grain.....	“ 1.

Achillea Millefolium.

(Yarrow.)

Mild aromatic tonic, anti-spasmodic and astringent. Employed in intermittents, flatulent colic and nervous affections; for the suppression of hemorrhages and of profuse mucous discharges, and in low forms of exanthematous fevers with difficult eruptions.

PREPARATION.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram.
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Alnus Rubra.

(Tag Alder.)

Alterative, emetic, and astringent. Useful in scrofula, secondary syphilis, and several forms of cutaneous disease. Its astringent properties render it useful in hematuria, and other hemorrhages. The *alnuin* possesses alterative, tonic, and astringent powers, and is recommended in herpes, syphilis, scorbutus, scrofula, impetigo, &c. See Journal of Materia Medica, vol. 1.

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 2 drams.
Alnuin.....	“ 1 to 8 grains.

Angelica Atropurpurea.

(Angelica Root.)

Aromatic, stimulant carminative and diuretic; used in flatulent colic, heart-burn, in diseases of the urinary organs and passive dropsy as a diuretic with *uva ursi*, and *eupatorium purpureum*, and as a popular remedy to promote menstruation.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.

Anthemis Nobilis.

(*Chamomile.*)

Tonic, alterative and emetic. Given in small doses its tonic and alterative properties are manifest; in large ones it is emetic. Used in dyspepsia, intermittent and typhus fevers, in flatulence, colic, spasms of the stomach, hysteria, nervous diseases, and in painful dysmenorrhea. It improves the digestive organs, and is recommended as an anti-periodic, and as an agent for preventing suppurations in phlegmonous erysipelas and in phthisis. M. Ozanam affirms of it the great virtue of preventing suppurations, when the evil has not advanced too far, and of drying them up where they have existed for a long time. He says: "Chamomile in large doses will be indicated in the prevalent diathesis of amputation, in puerperal fever, in phlegmonous erysipelas—in fact, in every case in which it is desired to prevent too abundant or too long continued suppurations."

PREPARATIONS.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.
Solid "....." 4 to 20 grains.
Pills, 2 grains....." 1 to 4.

Apocynum Androsæmifolium.

(*Bitter Root.*)

Alterative, diuretic, diaphoretic, emetic, tonic and laxative. Valuable in the treatment of chronic, hepatic affections, dyspepsia, amenorrhea, rheumatism, syphilitic affections, scrofula, jaundice and dropsy. In doses of forty to sixty grains of the root pulverized, it promptly produces emesis, with little previous nausea. The extract may be given in from two to eight grain doses, and repeated as circumstances might require. See Journal of Materia Medica, Oct., 1866.

PREPARATIONS.

Fluid Extract.....Dose, tonic, 10 to 20 drops.
" "....." diaphoretic, 15 to 25 drops.
" "....." emetic, $\frac{1}{2}$ to 1 dram.
Solid "....." 2 to 8 grains.
Apocynin .. " $\frac{1}{2}$ to 2 "
Pills of Apocynin, 1 grain....." 1 to 2.
" Extract Apocynum, 2 grains... " 1 to 4.

Apocynum Cannabinum.

(*Indian Hemp.*)

Tonic, alterative, powerful emeto-cathartic, diaphoretic, expectorant, inducing a tendency to sleep, independent of the exhaustion consequent upon vomiting. The evacuations brought on by it are large, feculent, watery, and are succeeded by perspiration. It is a most powerful hydragogue, cathartic, and diuretic.

It acts so powerfully in draining the system, that Dr. Rush called it the "vegetable trocar." Dr. Valentine Mott used it in dropsy, among his clinical patients. It is suited to tonic dropsy, being too active for cases of an atonic character, where iron is advisable.

Dr. Knapp gave it in intermittent fever, pneumonic affections, dysentery, and as an alterative in enteritis. As a tonic, it is admirably calculated to improve the tone of the digestive apparatus, and through this medium produces a corresponding effect upon the general system.

The following extract is from the pen of Dr. Griscom: "The indian hemp, when taken internally, appears to have four different and distinct operations upon the system: 1st, as an emetic; 2d, as a purgative; 3d, as a sudorific; 4th, as a diuretic. Each of these effects it produces almost invariably. Its first operation, when taken into the stomach, is that of producing nausea, if given in sufficient quantity (which need not be large), and if this is increased, vomiting will be the result. It very soon evinces its action upon the peristaltic motions of the *prima via*, by producing copious feculent and watery discharges, particularly the latter; which action, when once excited, is very easily continued by the occasional administration of a wineglass-full of the infusion. The next operation of this remedy is upon the skin, when it displays its sudorific properties often in a very remarkable manner. Copious perspiration almost invariably follows its exhibition, to which effect is, in a great measure, attributed by some, the powerful influence it exercises over the various forms of dropsy. The activity of its diuretic properties does not appear to be so great in many instances as in others. In some cases, the urinary secretion, although somewhat increased in quantity, is not such as to be commensurate with the effect produced on the disease by the exhibition of the medicine. In other instances, its diuretic operation has been more manifest, causing very profuse discharges of urine, and in a very short time relieving the overloaded tissues of their burden."

In typhoid fever, during the convalescing stages, it is used in combination with *hydrastis* or *gentian*. The wine of *apocynum* is an excellent form for administering this remedy in cases of

dropsy, in that while *apocynum* is producing its peculiar effects, the *wine* both assists it by its tonic properties and keeps up the vigor of the system. See Journal of Materia Medica, Aug., 1861, Oct., 1866.

PREPARATIONS.

Fluid Extract.....	Dose, tonic,	5 to 15 drops.
" "	" emetic,	20 to 30 "
Solid "	"	1 to 5 grains.
Pills, 1 grain.....	"	1 to 3

Aralia Hispida.

(*Dwarf Elder.*)

Sudorific, diuretic, and alterative. Is regarded as very valuable in dropsy, gravel, and in suppression of urine. Dr. Peck, of Mass., recommends it as a diuretic in dropsy, particularly so as being more acceptable to the stomach than other remedies of the same class.

PREPARATION.

Fluid Extract.....Dose, 1 to 2 drams.

Aralia Racemosa.

(*Spikenard.*)

Alterative and gently stimulant. Used in cutaneous, rheumatic and syphilitic affections, and in pulmonary diseases.

Recommended as having been administered with considerable success in dropsies.

Michaux cites it as sudorific. Dr. Sarrazin makes mention of it as very useful as a cataplasm in inveterate ulcers.

PREPARATION.

Fluid Extract.....Dose, 1 to 3 drams.

Arctostaphylos Uva Ursi.

(*Uva Ursi.*)

Astringent, tonic and diuretic. As an astringent, it is applicable to all the purposes for which astringents are used, as in chronic diarrhea and dysentery, diabetes and menorrhagia. Its principal use, however, is in chronic affections of the kidneys and urinary passages, in vesical catarrh, chronic gonorrhea, gleet, leucorrhea, incontinence of urine, strangury, and in excessive mucous discharges. In gonorrhea, with bloody and mu-

cous discharges, and pain in the vesical region, it speedily allays all these unpleasant symptoms. Dr. Harris, of Fayette, Alabama, prefers it to ergot, in its property of promoting uterine contraction. Dr. De Beauvais says he has seen, among other facts, the *uva ursi* arrest, in a young hysterical woman, in about half an hour from the first dose, a very severe vesical tenesmus. The same thing occurred with a person with hemorrhoids, blenorragia, and varices of the neck of the bladder. For further remarks, see Journal of Materia Medica for 1858, and 1859.

Incompatibles. — Salts of iron and lead, gelatin, tartar emetic, nitrate of silver, and infusion of yellow cinchona.

PREPARATIONS.

Fluid Extract.....	Dose, 1-3 to 1 dram.
Solid ".....	" 5 to 15 grains.
Pills, 2 grains.....	" 2 to 7.

Aristolochia Serpentaria.

(Snake Root.)

Stimulant, tonic, diaphoretic and diuretic. In typhoid febrile conditions, in cases where active stimulation can not be borne, it will be found very available. As a gargle, it is valuable in malignant sore throat. In dyspepsia, it has been employed as a tonic, and has proved useful in amenorrhea. SYDENHAM mentioned serpentaria as a remedy for intermittent fever. Some attribute to it anthelmintic properties. It has been employed as a diaphoretico-diuretic in rheumatism.

Dr. GEO. D. WHELDON speaks highly of its alterative properties in certain cutaneous diseases.

It is said to add much to the efficacy of cinchona. See Journal of Materia Medica, June, 1860.

PREPARATION.

Fluid Extract.....	Dose, $\frac{1}{2}$ to $\frac{1}{4}$ dram.
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Arnica Montana.

(Arnica.)

The first effect from the operation of this medicine is an irritation of the digestive organs, marked by a sense of heaviness in the epigastric region, nausea, and sometimes vomiting, but these soon pass off if the medicine is persisted in, in moderate doses. The second effect is manifest on the skin, and the entire nervous system, by headache, more or less severe, by spasmodic movements, tingling and pricking of the limbs, and a sort of contrac-

tion in the respiratory muscles. It is a very energetic stimulant. In small doses, it accelerates the pulse, promotes perspiration, increases the secretions of the kidneys, &c. In Germany, it is used as a stimulant in typhoid fever and other adynamic febrile diseases, in chronic palsy and amenorrhea; also as a tonic in rheumatism, and as a tonic and diuretic in the asthenic forms of dropsy. It has proved very useful in intermittent fever, also in nyctalopia and amaurosis, and in that disordered condition of the system which succeeds concussion of the brain from falls and blows. It has been recommended in diarrhea, dysentery, nephritis, gout, chlorosis and diseases where there is debility, torpor or inactivity of function.

Externally, it is used in the form of a fomentation, or diluted tincture or fluid extract to prevent or discuss local inflammation, and to prevent ecchymosis.

See Journal of Materia Medica, vol. 1.

Antidotes.—Vegetable acids are recommended to counteract its poisonous effects.

Contra-indications.—Inflammatory and hemorrhagic diathesis. Internal congestion.

Incompatibles.—Sulphates of iron and zinc, acetate of lead, mineral acids, &c.

PREPARATION.

Fluid Extract.....Dose, 10 to 60 drops.

Artemisia Absinthium.

(*Wormwood.*)

Anthelmintic, tonic and narcotic. Used in intermittent fever, jaundice, and for worms. It is also used to promote the appetite in atonic dyspepsia, amenorrhea, chronic leucorrhea, obstinate diarrhea, etc. Combined with a fixed alkaline salt, it proves powerfully diuretic. Externally it is useful in fomentations for bruises and local inflammations, and has been advised as an external application in chronic affections of the abdominal viscera, either in the form of tincture, infusion or poultice. Said also to possess emmenagogue properties.

Incompatibles.—Sulphate of iron and zinc, acetate of lead, nitrate of silver, tartar emetic.

PREPARATIONS.

Fluid Extract.....Dose, 5 to 40 drops.
Solid “ “ 3 to 5 grains.

Artemisia Abrotanum.*(Southernwood.)*

Tonic and anti-spasmodic. Employed in intermittents to promote the appetite, in atonic dyspepsia, and in debilitated condition of the digestive organs. Formerly employed with success to expel worms, to prevent their formation and development; well worth a trial in visceral obstructions, jaundice, and hypochondriasis.

PREPARATION.

Fluid Extract.....Dose, 30 to 60 drops.

Artemisia Vulgaris.*(Mugwort.)*

Anthelmintic, tonic, and deobstruent; is reputed beneficial in epilepsy, hysteria, and amenorrhœa. Employed often as an emmenagogue, and in intermittent fevers; externally used in fomentations for bruises and local inflammations.

Dr. Burdach, of Germany, some years since, recommended this agent to the profession, as potent in epilepsy.

Dr. Neumeister, of Arneburg, has used mugwort, in connection with assafoetida, with marked success, in chorea.

It is pronounced, by some, efficient in the convulsive diseases of childhood.

PREPARATION.

Fluid Extract.....Dose, 20 to 40 drops.

Arum Triphyllum.*(Wild Turnip.)*

Acrid, expectorant, diaphoretic. It has been advantageously given in asthma, pertussis, chronic catarrh, chronic rheumatism, flatulence, croup, stomatitis, chronic laryngitis, bronchitis, low stages of typhus fever, and various diseases connected with a cachectic state of the system.

PREPARATION.

Fluid Extract.....Dose, 10 to 20 Drops

Aspidium Filix Mas.*(Male Fern.)*

Its specific property is anthelmintic. The accounts of its efficacy in the treatment of tapeworm are too numerous to admit of any reasonable doubt on the subject. DR. PESCHIER stated that in the course of nine months 150 tape worms had been expelled by the extract. DR. EBERS found it completely successful in eight cases. M. RONSEL never found it to fail. Its use should be followed by a purgative.

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 3 drams.
Solid ".....	" 9 to 15 grains.
Pills, 2 grains.....	" 4 to 7.

Asclepias Incarnata.*(White Indian Hemp.)*

Alterative, diaphoretic, and diuretic. Dr. Wm. Hauser, of Georgia, has used it with the happiest results in many forms of fever, but regards it especially, as equal to anything now known, in the treatment of gonorrhœa and syphilis. He has used it with little regard to the stage of the disease, and with the best success. Prof. Tully recommends it in catarrh, asthma, syphilis, rheumatism, and worms. Reputed by many to be emetic and cathartic.

Dr. King regards it as possessing anthelmintic properties, and as useful in chronic mucous diseases of the stomach. See Journal of Materia Medica, Oct., 1861.

PREPARATIONS.

Fluid Extract	Dose, 20 to 40 drops.
Solid "	" 8 to 5 grains

Asclepias Tuberosa.*(Pleurisy Root.)*

Diaphoretic, expectorant, carminative, diuretic, tonic and antispasmodic. Used in pleurisy, pneumonia, catarrh, febrile diseases, acute rheumatism and dysentery. Useful in indigestion, and in all cases of flatus in adults and children. It is said that a number of cases of prolapsus uteri have been cured under the use of one ounce of pleurisy root mixed with half an ounce of the root of *aletris farinosa*, and given, in dram doses, three times a day. It is said to have been prescribed with favorable effect in catarrh, bronchitis and other pulmonary complaints, where it was necessary to determine to the skin, and at the same time promote free expectoration. Dr. PARKER, of Massachusetts, employed it with great success, for twenty years, in dysentery. A pill composed of equal parts of *asclepidin* and *dioscorein*, will be found very beneficial in flatulency, borborygmi, and where persons are subject to flatulent or bilious colic. See Journal of Materia Medica, Oct. 1861.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 2 drams.
Asclepidin.....	" 1 to 5 grains.
Pills of Asclepidin, 1 grain	" 1 to 5.

Atropa Belladonna.

(*Belladonna.*)

REMEDIAL EMPLOYMENT.—*Tumors.*—There is abundant evidence in favor of its efficacy in discussing glandular affections, particularly in engorgements of the breasts, and in scrofulous tumors and swellings of the joints; employed both internally and externally. In BRAITHWAITE'S Retrospect, Part 38, p. 175, it is recommended in the form of an ointment as a convenient application to carbuncles or boils. DUBOIS remarks that belladonna alleviates, more than any other remedy, the pains of cancer, and cures sometimes, if not cancer, diseases closely resembling it.

Neuralgia.—M. TROUSSEAU employed belladonna successfully in the treatment of this disease. He administered the extract in one-fifth of a grain every hour until vertigo was produced. Then the frequency of the doses is to be diminished, but their impression ought to be maintained for several days, or until no trace of the attack remains. Dr. HUTCHINSON, of Nottingham, prescribed this agent three times a day, beginning with one-quarter of a grain, gradually increasing the dose to one grain. COPLAND says that belladonna is one of the most successful remedies for the relief and cure of this class of diseases.

It will be found advantageous many times, to give it in combination with quinine, or with some of the preparations of iron. It is recommended to be employed internally and externally. Dr. HUNT has an excellent paper on this disease, in BRAITHWAITE'S Retrospect, Part 10, and his main reliance for a cure is belladonna.

Spasmodic Diseases.—Belladonna relieves the pain consequent upon spasm of the sphincter ani muscle. DUPUYTREN employed this ointment combined with acetate of lead, and presumed that its efficacy depended upon its direct power of preventing constriction of the sphincter. It will be found valuable in convulsions, spasms, epilepsy, puerperal convulsions, whooping cough, chorea, mania, paralysis, amaurosis, rheumatism, gout, dysmenorrhea, obstinate intermittents, rigidity of the os uteri, and all diseases in which the nervous system is involved.

Spasm of the urethra is also stated to have been overcome, so as to permit the escape of calculi from the bladder, by means of friction with extract of belladonna upon the perineum.

Incontinence of Urine.—MORAND, TROUSSEAU, BLACHE, BRETONNEAU, BROKE, HUTCHINSON, HEWSON, and CONDIE attest to its efficacy in curing this infirmity. The Medical Times and Gazette also make favorable allusion to its use in this connection.

Whooping Cough.—Give to a child three years old, afflicted with this malady, three drops of fluid extract of belladonna

three times a day. Increase or diminish the dose to correspond to the age or susceptibility of the patient. By adding half a grain of *sulphate of zinc* to each dose, or a drop or two of *nitric acid*, the cure will be more speedily accomplished. Let the effect on the eye be the index for graduating the dose.

Constipation.—TROUSSEAU declares belladonna to be the remedy *par excellence* for habitual constipation. Give it, in doses of a quarter of a grain, two or three times in twenty-four hours. COPLAND recommends small doses of belladonna in alvine obstructions.

Strangulated Hernia.—In spasmodic affections in which there is paroxysmal muscular contractions, belladonna has been beneficially employed. DAVID reports two cases in which the internal use of this remedy led to the reduction of strangulated hernia, which seemed to demand an operation. He gave half a grain of the extract every half hour. In one case three, and in the other four doses were taken. In the *Gazette Hebdomaire*, is reported a case of inguinal hernia, which was relieved after taxis had failed, by the administration of the extract of belladonna in three or four grain doses every half hour. The tincture of belladonna was also employed locally by means of a flax-seed poultice.

Dysmenorrhea.—Give one-fourth of a grain of extract of belladonna with one grain of *sulphate of zinc* every two or three hours until the pain ceases. Increase the dose if necessary. Apply it also externally in the shape of a plaster of the simple extract spread on adhesive plaster.

Rigidity of the Uterus during Labor.—This may readily be controlled by an ointment made of belladonna and lard, and with the finger apply it to the mouth of the uterus. In the *American Med. Monthly* may be found a paper of B. F. BARKER's on belladonna shortening labor. Dr. BARKER gives a table of one hundred and forty-seven cases of labor, in which this remedy had been used for dilating the os externum by comparatively painless contractions.

Laryngitis.—Dr. Stillé says that this agent applied to a blistered surface appears to have been promptly and completely efficient in some cases of laryngitis which displayed more or less of a spasmodic element. Give it internally in this complaint, in doses of half a grain of the extract once in six hours.

Tetanus.—Dr. HUTCHINSON has reported many cases of traumatic tetanus cured by the extract of belladonna. Dr. H. reports that the specific action of the medicine upon the pupils was followed by an abatement of the spasms, but this was not until the dose was increased from half a grain to a grain of the extract every three hours to four grains every two hours. It was then gradually diminished.

Epilepsy.—Should be continued for months in doses sufficiently large to manifest the specific effect of the remedy upon the pupils.

Intolerance of Light.—LISFRANC treated six cases of excessive sensibility to light, by a local application of the extract of belladonna applied around the orbit; some of the cases were chronic conjunctivitis, and others acute.

Dr. JACOB has some valuable suggestions relative to ophthalmic cases in BRAITHWAITE's, Part 13, p. 311. He speaks highly in favor of the use of belladonna.

Salivation.—Give the belladonna three times a day. Dose,—half a grain of the extract.

Incontinence of Fæcal Matter.—Dr. RICHARD reported the case of a boy suffering from this affection, which had resisted all the agents usually recommended. He prescribed the syrup of belladonna internally, and placed a suppository coated with belladonna pomade in the rectum. Two days after the commencement of this treatment, the child had no more involuntary stools, and was cured of the infirmity. The same treatment was subsequently employed for the like inconvenience and with satisfactory results.

Lead Colic.—With this agent most cases have been relieved, from the first to the third day. BRAITHWAITE's, Part 24, p. 116; also London Journal of Medicine, Aug. 1851, p. 721.

Midwifery.—R. P. STEPHENS has published a paper in the Boston Med. and Surg. Journal, vol. 30, p. 501, in which several cases are reported of the beneficial results of belladonna in connection with this subject.

Chorea.—Numerous cases might be instanced showing the beneficial effects of belladonna in this harrassing complaint. The highest authority for its use may be found in most of our American Medical Journals, also in those of Europe.

To Arrest the Mammary Secretions.—Mr. GOOLDEN, in 1856, reported his successful use of belladonna in arresting the secretion of milk. His statement was speedily confirmed by Drs. WILLEY, of St. Paul, Minn., BURROWS, of Liverpool; HARRIS, of Ottawa; BACON, BLYTHMAN, NEWMAN and others.

Prophylactic against Scarlatina.—Give two or three drops of fluid extract of belladonna two times a day. Continue its use during the time the epidemic remains. Should it be found necessary to continue the use of the agent over two weeks, diminish the dose.

Poisoning by Opium.—See the writings of STILLE, ANDERSON, MUSSEY and others.

THERAPEUTIC PROPERTIES OF BELLADONNA.—*Conclusions of M. Dubois.*—

1. That belladonna is not without efficacy in phlegmasiæ, especially in those of the globe of the eye.

2. That it is the best remedy known in the photophobia which so frequently accompanies inflammation of the eye.

3. That its power as a prophylactic in scarlatina can hardly be contested.

4. That it sometimes cures certain hemorrhages, as hæmoptysis, hæmatemesis, and metrorrhagia.

5. That it is a remedy *par excellence* for neuralgia, for whooping cough and most of the neuroses.

6. That it is a remedy *par excellence* to combat pain, especially when external.

7. That it alleviates more than any other remedy the pains of cancer, and cures sometimes, if not cancer, diseases closely resembling it.

8. That it can be advantageously employed in spasmodic contraction and occlusion of the pupil; to produce procidencia of the iris, and to break up adhesions; to prevent the inflammation of the iris so frequent after this operation; to maintain dilatation of the pupil, and to diminish the chances of adhesions after the operation of couching; to prevent secondary cataract; to re-establish vision, temporarily at least, when the lens is opaque in the center, or when there are opacities of the cornea; to assist the diagnosis in some diseases of the eye.

9. That it is of real efficacy in some cases of strangulated hernia.

10. That its property in facilitating labor in spasmodic constriction of the uterine neck is powerful and incontestible.

11. That it produces advantageous results in some cases of fissure of the anus.

12. That its employment may be more or less useful in spasmodic constriction of the bowels, in constipation, in spasmodic contraction of the rectum, of the anus, and of the vulva; in phimosis and paraphimosis, spasmodic stricture of the urethra, retention of urine, strangury, spasmodic stricture of the larynx and œsophagus; in blepharospasm, incontinence of urine, nephritis colic, hemorrhoids, &c.

Finally, that belladonna should be placed in the first rank of medicinal substances. For fuller statements of its properties, see *Journal of Materia Medica*, for August and September, 1858—Prof. Lee, June, 1860—Dr. Bates, Sept., 1862.

Antidotes.—The remedies recommended are, stomach pump, iodine, emetics, purgatives, cold application to the head; in the comatose stages, ammonia internally, with external stimulants.

Incompatibles.—Alkalies, tannin, vegetable astringents and opium.

PREPARATIONS.

Fluid Extract.....	Dose, 3 to 10 drops.
Solid "	" $\frac{1}{2}$ to 1 grain.
Pills, $\frac{1}{2}$ grain.....	" 1 to 4.
" $\frac{1}{2}$ "	" 1 to 2.
" 1 "	" 1 to 2.
" of Atropia, $\frac{1}{16}$ grain.....	" 1 to 2.

Aurantii Cortex.*(Orange Peel.)*

Orange peel is a mild tonic, carminative and stomachic, but is seldom used alone. It is employed to flavor other medicines, to correct their nauseating tendencies, and to assist their stimulant impression on the stomach. It is a very useful addition to bitter infusions, tinctures or decoctions.

Incompatibles.—Infusion of bark, sulphat  of iron, lime water.

PREPARATION.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 2 drams.
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Baptisia Tinctoria.*(Wild Indigo.)*

Its antiseptic properties give it a medicinal character, though it is in addition, sub-astringent, cathartic, and emetic. It acts powerfully on the glandular and nervous system, increasing all the glandular secretions, and arousing the liver especially to a normal action. It is useful in scarlatina, typhus fever, and in that state of the system attending gangrene, or mortification. In threatened or existing mortification, it is extremely useful as an internal or external remedy. The decoction is an excellent application as a wash or gargle to malignant ulcerous sore mouth and throat, mercurial sore mouth, scrofulous or syphilitic ophthalmia, erysipelatous ulcers, gangrenous ulcers, sore nipples, &c. The *baptisin*, combined with *leptandrin*, *podophyllin*, *quinia*, or *cimicifugin*, in diseases where these agents are indicated, will be found valuable in typhus and typhoid fevers, and all diseases of the typhoid character, when administered internally.

PREPARATION.

Fluid Extract.....	Dose, $\frac{1}{2}$ to $\frac{1}{2}$ dram.
Baptisin.....	" 1-4 to 1-2 grain.

Barosma Crenata (Diosma Crenata.)*(Buchu.)*

Stimulant, diuretic, anti-spasmodic and tonic. Useful in all diseases of the urinary organs attended with increased uric acid; in irritation of the bladder and urethra attending gravel, in catarrh of the urinary bladder, and incontinence of urine connected with diseased prostate, in dyspepsia, dropsy, cutaneous affections and chronic rheumatism.

By many physicians it is regarded as valuable in all diseases of the sexual organs, even of long standing; in constitutional debility, incident to secret habits of the young.

Buchu is pleasant in its taste, efficient in its action, and can be used in all cases with perfect safety. It is a moderate excitant, diuretic, and tonic, and is said to have afforded essential service in chronic cases of rheumatism and gout. Acting on the urinary secretion, the urine is separated in larger quantities, and exhales an aromatic odor. See Journal of Materia Medica, vol. 5.

Buchu Compound.

This combination of *buchu*, *juniper berries*, *uva ursi*, and *cubeb*s, has been employed with decided success in diseases of the urinary organs to which it has a peculiar and specific direction. It may be used in cases when buchu alone would be used to arrest excessive discharges from the urethra; in the treatment of gonorrhoea and gleet, in chronic bronchial inflammation, in ulcerations of the kidneys, bladder, and urinary passages, &c. It is mild in its operation, and pleasant, forming an agreeable and safe remedy in these complaints.

PREPARATIONS.

Fluid Extract of Buchu.....	Dose, 1-4 to 2 drams.
“ “ “ Compound.....	“ 1-4 to 2 drams.

Benzoin Odoriferum.*(Fever Bush.)*

Aromatic, tonic, and stimulant; has been very successfully employed in the treatment of ague and typhoid forms of fever, and is useful as a refrigerant and exhilarant in other forms, for allaying excessive heat and uneasiness. It is used warm to produce diaphoresis.

PREPARATION.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram.
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Berberis Vulgaris.*(Barberry.)*

Tonic, laxative. Used in cases where tonics are indicated in jaundice, chronic diarrhea and dysentery, cholera infantum; serviceable as a wash or gargle in apthous sore mouth and in ophthalmia. GRIFFITH says it acts like rhubarb, and with equal promptness and activity.

PREPARATION.

Fluid Extract.....Dose, 1-4 to 1 dram.

Canella Alba.*(Canella.)*

Canella is a useful aromatic stimulant and tonic. Taken in small doses, it determines heat to the epigastrium, and augments the digestive forces: then, secondarily, it occasions constipation, and acts in a stimulating manner on the whole system, and particularly when administered in considerable quantities. This medicine is seldom employed alone, but, joined with other tonic and stimulating substances, is administered with advantage in cases of atony of the stomach, chronic diarrhea, and also in the last stages of adynamic and ataxic fevers.

The use of this medicine has been much boasted of in some cases of vomiting not dependent on organic lesion of the stomach. It is a useful adjunct in atonic diarrhea. It is employed to mask the odor and taste of other medicines; and with this design, as also as a tonic, it enters into a great variety of compound preparations. Associated with *aloes*, it has been largely used as an emmenagogue. It may be used with decided advantage in dyspepsia, debility, and in other diseases, when a warm aromatic is indicated. In the treatment of scurvy, canella has gained considerable reputation. Internally used as an adjunct to resinous cathartics, for a carminative.

PREPARATION.

Fluid Extract.....Dose, 15 to 30 drops.

Cannabis Indica.*(Indian Hemp, Foreign.)*

Narcotic, nervine and anæsthetic, also hypnotic. The Chinese were acquainted with its use as an anæsthetic as early as the

third century of the Christian era, and a celebrated Chinese physician is said to have operated on his patients after having rendered them insensible by a preparation of wine and hemp powder. This agent has been chiefly employed in spasmodic and painful affections, and in several of these its curative powers are unquestionable.

Tetanus.—The cases of this affection recorded by Dr. O'SHAUGHNESSY demonstrate, as the author remarks, that when given boldly in large doses, the resin of hemp is capable of arresting the progress of this formidable disease, and in a large proportion of cases of effecting a perfect cure. Prof. MILLER, of Edinburgh, says; "My own experience speaks loudly in favor of hemp. I can now record three fortunate cases under its use, all traumatic tetanus." Two cases of trismus nascentium are reported by Dr. P. C. GAILLARD, and of the traumatic form of tetanus; one case by Mr. SKUES, one by Mr. COOK, and one by Dr. BAILEY, as cured by cannabis.

Neuralgia.—In this disease the preparations of hemp have been found to palliate, and in not a few instances to effect a perfect cure. Dr. DONOVAN has reported many cures; Dr. C. B. WILLIAMS, Dr. CLENDINNING and Sir JAMES MURRAY many more.

Rheumatism.—The action of cannabis appears to have been salutary in this disease.

Chorea.—Dr. C. B. WILLIAMS says that cannabis palliated the action of the muscles. Dr. CARRIGAN has published three cases, one of which was inveterate, but all of them cured by this agent.

Hypnotic.—Dr. A. CHRISTIAN recommends this article where opium, from long continued use, has ceased to produce its proper effects. He mentions a case in which cannabis entirely allayed the intense itching of eczema, while the patient continued under its effects, and procured for him refreshing sleep which no other means could obtain.

Delirium Tremens.—Cannabis has been employed with satisfactory effects in the treatment of this disease. See Journal of Materia Medica, vol 3, p. 130.

PREPARATIONS.

Fluid Extract.....	Dose, 5 to 10 drops.
Solid ".....	" 1 to 2 grains.
Pills of Cannabis Indica, $\frac{1}{4}$ grain.....	" 2 to 4.
" " 1 ".....	" 1 to 2.

Capsicum Annuum.

(Cayenne Pepper.)

Cayenne Pepper is a powerful stimulant, producing when

swallowed, sense of heat in the stomach, and a general glow over the body, without any narcotic effect. It is much employed as a condiment, and proves highly useful in correcting the flatulent tendency of certain vegetables, and aiding their digestion. As a medicine, it is useful in cases of enfeebled and languid stomach, and is occasionally prescribed in dyspepsia and atonic gout, particularly when attended with much flatulence, or occurring in persons of intemperate habits. It has been used with success, combined with quinine, in cases of intermittent and low form of fever. Small doses have been recommended to be administered internally as a cure for piles.

Its most important application, however, is in the treatment of malignant sore throat and scarlet fever, in which it is used both internally and as a gargle. It has been used in spasmodic affections, passive hemorrhages, especially uterine, and when combined with the compound powder of *ipecacuanha*, will, in many instances, promptly arrest hemorrhage after parturition.

Contra-indications.—Acute fevers. Acute inflammation, particularly of the genito-urinary organs.

Incompatibles.—Corrosive sublimate, acetate of lead, nitrate of silver, sulphates of iron, zinc, and copper, carbonates of the alkalis.

PREPARATIONS

Fluid Extract.....	Dose, 3 to 15 drops.
Pills, 1 grain.....	" 1 to 2.

Cassia Acutifolia.

(*Senna.*)

Senna is an active hydragogue cathartic. Its nauseous taste is disguised by giving it in strong coffee, or by the addition of milk and sugar. Senna possesses but one specific action, that of a purgative; in which respect it is so certain, so manageable, and so convenient, that few remedies have given better satisfaction or are held in higher repute. Its action is chiefly on the smaller intestines, increasing their mucous secretions, as well as their peristaltic motions, and producing loose brown evacuations. It is well adapted for those cases which require an active and certain purgative, with a moderate stimulus to the abdominal and pelvic viscera. Thus in *constipation* and *inactivity of the alimentary canal* requiring the continued or frequent use of purgatives—in worms—in determination of blood to the head—and in very many other cases that readily suggest themselves, it answers an excellent purpose.

Its peculiarity of not leaving the bowels confined renders it a

valuable medicine in such cases. Senna is seldom given alone, but along with some corrective of its griping qualities, or else associated with other purgatives. The fluid extract is the most concentrated and active of all of the preparations of this medicine, and in combination with *epsom salts*, *manna* and *fennel seeds*, known as the *black draught*, is the most efficient mode of administering this medicine.

It forms an excellent purgative for children in doses of fluidram, while the syrup is admirably well adapted for infants, and may be prescribed in same quantity.

In atonic dyspepsia, particularly when attended by constipation, a mixture of equal parts of the extract of *senna* and *gentian*, proves eminently serviceable. It proves an efficient purgative in atonic duodenal dyspepsia. In bilious derangements, a judicious use of a mild *mercurial*, and the extract of *senna* is recommended, in many instances, as a safe and reliable plan of treatment.

It is a prompt, efficient, and safe purgative, well calculated for fevers and febrile complaints, and other cases where a decided, though not violent impression is desired. *Senna* is contra-indicated in an inflammatory condition of the alimentary canal, hemorrhoids, *prolapsus ani*, &c.

Senna Compound.

This is a preparation of *senna*, *jalap* and *mandrake*, with aromatics. It operates as a mild but sure cathartic, and as an alterative.

Senna and Jalap.

The virtues that are claimed for this preparation are, that it becomes a manageable and reliable purgative. The irritant effects of jalap are, to a great degree, counteracted by the more kindly operation of senna. This compound is applicable in all cases where it is desirable to produce a powerful influence on the bowels, or to obtain copious evacuations. See Journal of Materia Medica, v. 5, p. 201.

Incompatibles.—Strong acids, carbonates of the alkalies, tartar emetic, lime-water, salts of iron, silver, and lead, corrosive sublimate, infusion of yellow bark, &c.

PREPARATIONS.

Fluid Extract of Senna,		Dose, 1 to 2 drams.
"	" aqueous,	" 1 to 2 "
"	" compound,	" 1 to 2 "
"	" and Jalap,	" $\frac{1}{2}$ to 1 "
"	" and Dandelion,	" 1 to 2 "
"	" and Pink root,	" $\frac{1}{2}$ to 1 "
"	" and Rhubarb,	" $\frac{1}{2}$ to 1 "
Solid Extract,		" 8 to 8 grains.
Pills, ' Senna, 2 grains,		" 1 to 2.

Cephælis Ipecacuanha.

(*Ipecacuanha*.)

Emetic, expectorant and diaphoretic. Alterative, in small doses. Some authors suppose it to possess narcotic properties. In doses of one-quarter of a grain to one-half, it acts as a tonic.

Diseases of the Lungs.—It is a valuable remedy in acute bronchitis. The symptoms which indicate its use are a short, tickling, paroxysmal and spasmodic cough, to relieve which, small and repeated doses, (half a grain every hour), are the most effectual. This medicine is one of the safest and most efficient in suffocative catarrh, and can be used with confidence, either in old age or infancy. The paroxysmal and spasmodic cough and whooping cough are sometimes rendered much milder by its use.

Diseases of the Stomach and Bowels.—DAUBENTON recommended minute doses of ipecacuanha to be taken in the morning fasting, for the relief of gastric debility, and constipation upon want of energy in the intestines. FOTHERGILL recommended this agent in diarrhea. It has been held in high esteem as a remedy for dysentery.

Hemorrhages.—Writers of distinction ascribe efficient hæmostatic virtues to this medicine. MANGETUS imputes to a dose of one dram of ipecacuanha the subsidence of an alarming hemorrhage from the womb, which preceded the expulsion of the ovum in a case of abortion. Dr. OSBORNE, of Dublin, says that the treatment of simple menorrhagia by ipecacuanha has never yet failed in his hands, and that he has also found it successful in epistaxis. Cases of its success in hæmoptysis and menorrhagia are mentioned by FRANK. In intermittent fevers of a bilious type, and still more in the bilious and remittent fevers, the administration of a full emetic dose of ipecacuanha at the outset of the disease, and even for two or more successive days, forms perhaps, the surest method of moderating the violence and shortening the duration of the attack. It also prepares the way for a successful administration of cinchona.

Ipecac and Seneka.

This combination is administered with decidedly beneficial results. The action of ipecac, by this ingredient, is rendered more energetic and serviceable. See *Journal of Materia Medica*, vol. 4.

Incompatibles.—Vegetable astringents, acetate of lead, &c.

PREPARATIONS.

Fluid Extract.....	Dose,	{ Expectorant, 5 to 10 drops.
“ “ Ipecac and Seneka.....	Dose,	{ Emetic, $\frac{1}{4}$ to 1 dram.
Pills of Ipecac $\frac{1}{4}$ grain.....	Dose,	1 to 3

Pills of Dover's Powders, $2\frac{1}{4}$ grs.	Dose, 1 to 4.
Pills of Ipecac and Opium, ($\frac{1}{4}$ gr. Opium, $\frac{1}{4}$ gr. Ipecac, 1 gr. Sulp. Potash), Two grains [equal to 5 grains Dover's Powder]....	Dose, 2 to 6.
Pills of Ipecac and Opium, (1 gr. Opium, 1 gr. Ipecac, 2 grs. Sulp. Potash), Four grains, [equal to 10 grains Dover's Powder]....	Dose, 1 to 3.
" of Ipecac and Squill, 3 grains.....	" 2 to 3.
Fluid Ext. comp., Ipecac and Seneka. (Dr. Jackson's), Dose, $\frac{1}{4}$ to 1 dram.	

Chelidonium Majus.

(*Garden Celandine.*)

Celandine is stimulating, aperient, diuretic, and sudorific; it is used in hepatic affections, and is supposed to exert a special influence on the spleen. Applied in the form of a wash or poultice in scrofulous and cutaneous diseases and piles; also to indolent ulcers, fungous growths, &c. As a drastic hydragogue, it is fully equal to gamboge.

PREPARATIONS.

Fluid Extract.....	Dose, 10 to 20 drops.
Solid "	" 5 to 10 grains.

Chelone Glabra.

(*Balmony.*)

Especially valuable in jaundice and hepatic diseases; likewise for the removal of worms. Used as a tonic, in small doses, in dyspepsia, debility of the digestive organs, and during convalescence from febrile and inflammatory diseases. As a tonic its influence seems to be expended principally upon the digestive apparatus, increasing the appetite, promoting digestion and assimilation, improving the condition of the blood, in both volume and quality. See Journal of Materia Medica, vol. 2.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{4}$ to 1 dram
Chelonin.....	" 1 to 2 grains.

Chenopodium Anthelminticum.

(*Wormseed.*)

Wormseed is one of our most efficient indigenous anthelmintics, and is thought to be particularly adapted to the expulsion of the round worms in children. A dose of it is usually given before breakfast in the morning, and at bedtime in the evening, for three or four days successively, and then followed by some brisk cathartic. By some writers this variety is regarded as equal to *C.*

Ambrosoides, or *C. Botrysin*, in catarrh and homeral asthma, as an expectorant.

Contra-indications.—Fevers, according to Dr. Dewees.

PREPARATION.

Fluid Extract.....Dose, 1 to 2 drams.

Chimaphila Umbellata.

(*Pipsissewa. Prince's Pine.*)

Diuretic, tonic, alterative and astringent.

This plant is in some places vulgarly known as ground-holly, wintergreen, American wintergreen, pipsissewa, king's cure, Prince's pine, rheumatism-weed, and herbe-a-pisser—the latter from its recognized diuretic qualities. It is allied to the *uva ursi* in botanical as well as in medicinal qualities.

The extract taken internally acts as an agreeable tonic; it promotes the action of the secreting organs, more especially the kidneys, over which, indeed, it has appeared to exercise a specific influence, increasing the quantity of the urine, and beneficially influencing several forms of chronic nephritic disease; it has been employed in dropsy, chronic affections of the urinary organs, and in scrofula, in which last its reputation is so high that it has obtained the title of King's Cure. (Pereira.)

Dr. Somerville found *chimaphila* very useful as a diuretic evacuant in several cases of dropsy, which appear to have depended upon organic and incurable lesions, and he refers to similar cases treated by Satterly and Marcet. Dr. Chapman regarded it as distinguished for the activity and certainty of its diuretic operation, while it acted on the stomach as a tonic. Atonic and cachectic dropsy will be benefited by its use. *Chimaphila* was used by the aborigines and early settlers of America as a remedy for rheumatism, and for nephritic disorders. Dr. Ives says: "It will be granted by all who are familiar with its operation, that as a diuretic, it has unquestionable merit, and that, like *uva ursi*, it will frequently mitigate symptoms of gravel, and strangury proceeding from other causes. I have given it, alternately with *uva ursi*, in hæmaturia, the effect of severe and long continued inflammation with the most obvious benefit. This writer states that it is best suited to open, scrofulous ulcers, for which the decoction may be used internally, and also externally as a wash. Dr. Ives states that in some instances it has appeared to be of service in chronic cutaneous affections. It is especially useful in scrofula, chronic rheumatic, and nephritic affections. The decoction alone has cured ascites, and has been advantageous in strangury, chronic

gonorrhea, diarrhea, gleet, leucorrhea, and catarrh of the bladder. It is best adapted to those dropsical cases which are accompanied with much debility and loss of appetite. In urinary disorders, it may be used as a substitute for uva ursi, to which it is preferable, on account of being less offensive to the stomach. (K.)

It is highly esteemed by some practitioners as a remedy in scrofula, both before and after the occurrence of salivation; it has proved highly advantageous in obstinate ill-conditioned ulcers and cutaneous eruptions, supposed to be connected with a strumous diathesis. (W.)

The following statements of the effects on the economy in disease, are taken from Dunglison's New Remedies:—In Canada it is said to have been long employed in diseases of the urinary passages, especially calculus; in dropsy, and in chronic gout and rheumatism, its effect appearing to resemble, but not to exceed those ascribed to uva ursi. Somerville and Barton extol it as an excellent diuretic in different forms of dysuria, and in dropsies, especially such as succeed to acute diseases; in nephralgia, as a palliative, especially when the paroxysms are occasioned by gravel which has accumulated in the kidneys; and even in vesical calculus. Radius found it especially serviceable in dropsy, gout, rheumatism, and in inordinate activity of the secretory functions of the mucous membranes—chronic catarrh, phthisis, pituitosa, &c. According to him, it is contra-indicated where there is much fever, disposition to diarrhea, gastricism, and great debility of stomach. Windisch asserts it to be one of the best diuretics we possess; that it does not impair digestion; moderately accelerates the circulation; gently encourages the action of the bowels, and powerfully augments the urinary secretion. It was administered with advantage in dropsies unaccompanied by fever, and not dependent upon organic mischief, upon "corruption of the humors, or paralysis of the lymphatic textures." *In febrile conditions and inflammatory diathesis, it is said to have been always injurious, as well as when it was administered prior to the resolution of obstructions remaining after long protracted intermittents*; but when these are removed, and no excitement exists, more, according to Windsch, is to be expected from it than from any other agent, and he strongly advises that careful trials should be made with it in the proper cases. He advises, also, that its use be persevered in, in order that good effects may be derived from it. See Journal of Materia Medica, vol. 1.

PREPARATIONS.

Fluid Extract	Dose, $\frac{1}{2}$ to 1 dram.
Solid "	" 10 to 20 grains
Pills, " Chimaphila, 8 grains,	" 3 to 6.

Cimicifuga Racemosa.

(*Black Cohosh—Black Snake Root.*)

This is an active, powerful and useful remedy, and appears to fulfill a great number of indications. It possesses an undoubted influence over the nervous system, and has been successfully used in chorea, periodical convulsions, epilepsy, nervous excitability, asthma, pertussis, delirium tremens, and many spasmodic affections; in phthisis pulmonalis, cough, acute rheumatism, neuralgia, phlegmasia dolens, amenorrhea, dysmenorrhea, leucorrhea and other uterine affections. Its tonic and anti periodic virtues are well marked in remittent and intermittent fevers. It is very useful in other febrile and exanthematous diseases, especially among children, where there exists a strong tendency to cerebral irritation and congestion. It lessens the force and frequency of the pulse. In febrile diseases, it frequently produces diaphoresis and diuresis. In doses of one dram of the tincture, repeated every hour, it effected thorough cures of ophthalmitis conjunctiva without the aid of any local application. As a partus accelerator, it may be substituted for ergot. It is anti periodic. It exerts a tonic influence over both the serous and mucous tissues of the system, and will be found useful in a majority of chronic diseases. It is useful in the treatment of small pox, in which it should be given during the whole course of the disease. It is said to divest it of its malignant character. It has been pre-eminently successful in the treatment of chorea.

The *cimicifugin* is anti-spasmodic, tonic, diaphoretic, expectorant, alterative, narcotic, and ecbotic.

Chorea.—Dr. Hildreth, Beadle, Physic and others report many cases illustrative of the potency of this medicine in chorea, while Dr. Wood's testimony is, that he administered it in a case of chorea, which rapidly recovered under its use, after a failure of purgatives and metallic tonics.

Pulmonary Complaints.—It was claimed by Dr. Gardner as a valuable remedy in phthisis, and by Dr. Wheeler, as especially serviceable in protracted and obstinate cough. Its remedial effects, in these cases, are attributed by Dr. Wood to its sedative properties.

Rheumatism.—In this malady, whether acute or chronic, it is used with eminent success. Drs. Johnson and Davis declare the curative power of *cimicifuga*, in the early stages of this malady, to be no less than the preventive virtue of vaccination in variola.

Cases of puerperal hypochondriasis and depression are mentioned as yielding, rapidly, to this remedy; while again, by its advocates, it is claimed to be an important adjuvant in protract-

ted labor. Dr. Brandige deems the saturated tincture, as a local application in ophthalmia, superior to any other treatment.

Black Cohosh Compound.

The ingredients which enter into this compound are *black cohosh, wild cherry, ipecac, liquorice and senega*. It is alterative, expectorant and tonic, and stimulates most of the secretions. Its specific influence on the lungs is marked, lessening the frequency and severity of cough; rendering breathing less laborious, and diminishing the frequency of the pulse. It proves very beneficial in hepatic diseases, dyspepsia and pulmonary diseases. This compound is of service to promote the appetite, and the early establishment of the functions of the system to their normal state. The potency of cohosh, to fulfill many indications, is greatly enhanced by this preparation. See Journal of Materia Medica, vols. 2, 3, and 6.

PREPARATIONS.

Fluid Extract of Black Cohosh.....	Dose, $\frac{1}{2}$ to 2 drams.
“ “ “ Compound.....	“ $\frac{1}{2}$ to 1 “
Solid “	“ 4 to 8 grains.
Cimicifugin	“ 1 to 6 “
Pills of Cimicifugin, 1 grain	“ 1 to 4.
“ Ext. Cimicifuga, 2 grain.....	“ 2 to 4.

Cinchona.

(*Peruvian Bark.*)

Cinchona is tonic, and somewhat astringent, and, topically, antiseptic. It has succeeded well in cases of debility, from exhausting and protracted diseases, and in that languid and prostrate condition of the system prevalent during the heat of spring and summer months, when a general tonic is necessary.

Valuable in functional derangements of the stomach, improving digestion, and invigorating the nervous and muscular systems in diseases of general debility, and in convalescence from exhausting diseases. As a tonic it will be found of advantage in measles, small-pox, scarlatina, during the absence of fever or inflammation, also in cases when the system is exhausted by purulent discharges. It may likewise be used in all chronic diseases attended with debility, as scrofula, dropsy, obstinate cutaneous diseases, &c. To obtain the anti-periodic influence, the red and yellow barks are considered superior to the pale, while the pale is preferred as a tonic.

Cinchona Compound, (U. S. P.)

Compounded of Cinchona, Orange Peel, Gentian, Serpentina, Cloves, and Red Saunders.

This combination of tonics has met with the entire approbation of all who have used it, in cases of debility arising from the

weakening and exhaustion of the hot season, in dyspepsia, and in that debilitated condition of the system consequent to severe sickness, as well as accompanying chronic complaints.

In these cases Nature needs assistance, and only a gentle assistance, that she may bring the system back to its normal state, and give an increased vitality to the functions. In that enfeebled state of the system consequent to old age, a slight tonic stimulant is necessary, and in such cases the best results have followed from the use of the cinchona compound. It is applicable, indeed, to all cases when the cinchona alone would be administered.

Incompatibles.—Tartar emetic, salts of iron, lead, zinc, and silver; alkalies, all infusions containing tannic acid and gelatin, lime, and magnesia.

PREPARATIONS.

Fluid Extract of Cinchona.....	Dose, $\frac{1}{2}$ to 1 dram.	Id.
" " " Compound, (U. S. P.).....	" $\frac{1}{2}$ to 1	"
" " " Red.....	" $\frac{1}{2}$ to 1	"
" " " Calisaya	" $\frac{1}{2}$ to 1	"
Elixir Calisaya.....	" 1 to 2	"
" " Iron, Pyrophosphate.....	" 1 to 2	"
" " and Bismuth.....	" 1 to 2	"
" " and Strychnia.....	" $\frac{1}{2}$ to 1	"

Cissampelos Pareira.

(*Pareira Brava.*)

Tonic, diuretic, and aperient. Used in the various disorders of the urinary organs. Also recommended in calculous affections, leucorrhœa, dropsy, rheumatism and jaundice. PEREIRA says of it "Its efficacy in certain maladies of the urinary organs induces us to prescribe an almost specific influence to this root over the mucous membranes lining the urinary passages.

Dr. B. Brodie extravagantly praises its medical value in the treatment of chronic inflammation of the bladder. "I am satisfied," he remarks, "that it has a great influence over this disease, lessening very materially, the secretions of the ropy mucus, which is, itself, a great evil, and, I believe, diminishing the inflammation and irritability of the bladder also. It is regarded by some as anti-catarrhal. See Journal of Materia Medica, Dec., 1858.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.

Cocculus Palmatus.

(*Columbo.*)

Columbo root is bitter, aromatic, stomachic, anti-emetic, and as-

tringent. It has been advised in dysentery, in serous diarrheas and bilious fevers. Combined with *opium* in a small quantity, it is useful in the treatment of obstinate colics, and as an anti-emetic for combating the nausea and vomiting which so often accompany the first periods of pregnancy. Used in dyspepsia, chronic diarrheas, and dysentery; in convalescence from febrile and inflammatory diseases, hectic fever, and in the muscular debility of young children. Like other strong bitters, it occasionally checks the remittent and intermittent fevers of hot climates. The absence of irritating properties renders it also an appropriate tonic in the hectic fever of phthisis and other kindred affections. It is frequently administered in combination with other tonics, aromatics, mild cathartics, and antacids. In dyspepsia and vomiting it may be advantageously combined with the alkaline bicarbonates, as well as in debility with acidity of the stomach. See *Journal of Materia Medica*, vol. 2, Lee, on Columbo.

Incompatibles.—Ammonia, lime water, mineral acids, muriate of iron, nitrate of silver, acetate of lead, gelatin.

PREPARATIONS.

Fluid Extract.....	Dose 20 to 60 drops.
Solid ".....	" 4 to 10 grains.
Pills, 2 grains.....	" 2 to 5.

Colchicum Autumnale.

(*Meadow Saffron.*)

Cathartic, diuretic, alterative, emetic and sedative. Used in rheumatism, gout, dropsy, palpitation of the heart, scarlatina, gonorrhea, enlarged prostate, and in neuralgia. Prof. HAMMOND, of the University of Maryland, in some experiments instituted upon himself and others, arrived at the following conclusions:

1. That colchicum increases the quantity of urine.
2. That it increases the total amount of solid matters eliminated.
3. That this increase is mainly due to an augmentation of the organic matter.

4. That the amount of uric matter does not seem to be affected.

He regards colchicum as a true depurator of the blood, hence we have an explanation of its good effects in those blood diseases, gout and rheumatism. Dr. JOYEUX considers good preparations of colchicum a certain specific in gout and articular rheumatism, as much so as iodine in goitre, or iron in chlorosis. Dr. HOLLAND maintains that colchicum may, with care, be made a preventive in case of rheumatism as well as a curative agent. Dr. TODD lays down the following rules for the employment of this agent, which, it is believed, embody the soundest rules upon this subject.

1. The use of colchicum is most applicable to the sthenic form of gout of robust constitutions, and in the prime of life.

2. Colchicum should never be given at the outset of a paroxysm, nor until the bowels have been duly acted upon by mild purgatives.

3. The first doses should be very small and gradually increased.

4. It should always be administered, at first, uncombined with any other medicine, until the practitioner has satisfied himself that it does not disagree with his patient.

5. It should not be given in doses so as to excite nausea, vomiting or purging. These results should be regarded as indicative of the unfavorable operation of the medicine.

6. It may be regarded as acting favorably when, under its use, the urine is increased in quantity, a more abundant discharge of bile, and the skin secretes freely.

7. The effect should be carefully watched, as like digitalis, and other medicines, it is apt to accumulate in the system.

Many English practitioners recommend colchicum as almost a specific in neuralgia. TAIT, BENNETT and others recommend this agent in scarlatina. STÖCK claims to have used this agent successfully in dropsy. Dr. W. G. SMITH, of Port-au-Prince, recommends colchicum in the treatment of tetanus. The Lancet, 1849, vol. 1, p. 618, Dr. ROWLAND had lately treated tonsillitis with colchicum and cured every case so treated. See Journal of Materia Medica, vol. 2, and 4.

Contra-indications.—Great debility. Profuse diarrhea. Asthenic form of gout.

Incompatibles.—Acids render the vinous tincture drastic. Alkalies render it milder in its operation.

PREPARATIONS.

Fluid Extract of Colchicum	Root.....	Dose, 3 to 12 drops.
" "	" Seed.....	" 5 to 15 "
Solid "	" Acetic.....	" 1 to 2 grains.
Pills, "	" $\frac{1}{2}$ grain.....	" 1 to 3.

Comptonia Asplenifolia.

(*Sweet Fern.*)

Tonic, astringent and alterative. It possesses all the properties of the tonic and astringent balsams, and is useful in dysentery, diarrhea, hæmoptysis, leucorrhœa. The extract will be found of great efficacy in the irritable conditions of the intestines. Barton recommends it for diarrhea and summer complaints of children. See Journal of Materia Medica, Dec., 1859.

PREPARATION.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram
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Conium Maculatum.

(*Poison Hemlock,*)

Alterative and narcotic, possessing anodyne, anti-spasmodic, de-obstruent and diuretic properties.

The leaves of the hemlock are the part employed in medicine, which, as well as the seeds, owe their poisonous properties to a substance which has been variously designated, *conicine*, *conin*, *cicutine*, and *coneine*.

The action of the poison is exercised principally upon the spinal marrow, and is directly opposed to that of the *nux vomica*, *ignatia*, and their alkali—strychnine.

Strychnine irritates the spinal marrow, produces violent and permanent spasms of the muscles, and causes asphyxia. Conicine, on the contrary, exhausts the nervous energy of the spinal marrow, produces a general muscular paralysis, and by this exhaustion produces asphyxia equally with the former. Hemlock, given in a small dose, causes, at first, light vertigo, headache, and nausea; the urinary and cutaneous secretions are also increased. In an increased dose it acts like stupefying poisons, causing drowsiness, stupor, delirium, syncope, and sometimes death.

It is used to promote sleep, and will be found efficacious in allaying excessive action of the heart, in hypertrophy of this organ. All affections attended with an excited or excitable condition of the nervous or vascular systems, will be benefited by its use. Beneficial in coughs, and in phthisis, in intermittent fever, and in neuralgia. Conium may be combined to advantage with hydriodate of potassa in some cases of phthisis and strumous affections. It is highly recommended in chronic rheumatism, secondary syphilis, in scrofulous tumors, and ulcers, and in strumous ophthalmia. It is contra-indicated, save in conjunction with bark and iron, in those forms of disease in which cachexy and inflammatory tendency of a low grade are combined, producing emaciation, &c.

Fothergill strongly recommends this drug in the treatment of neuralgia and rheumatism.

It has been used with decided advantage in gonorrhea, in various diseases of the skin, in the complicated derangements of health attendant upon secondary syphilis, in excessive secretion of milk, in pertussis, asthma, chronic catarrh, and consumption, and in various other disorders connected with a general depraved state of the health. It is occasionally employed with the effect of relieving or palliating the symptoms, or favorably modifying the action of other remedies. Dr. Gibson, of the University of Pennsylvania, considers it efficacious in the cure of goitre.

Conium, unquestionably, proves useful in the treatment of cancer, mitigating pain, checking the progress of the disease, and sometimes affecting a radical and permanent cure. The less malignant may, with safety, be said to be under its control. Dr. S. W. Williams, of Deerfield, Mass., has treated many cases of diseased mammary glands successfully. Some of his cases are described as real open cancers. Dr. Paris recommends conium as a valuable palliative in bronchitis, (chronic), and in irritable states of the respiratory mucous membrane. Dr. Dewees observes that the most successful medicine which he has used in menorrhagia, is the extract of conium. Dr. Waring adds, the internal and external application of this medicine is attended with excellent effects in syphilitic ulcerations.

But whatever preparation be administered, or for whatever complaint prescribed, the dose should be gradually increased until unequivocal symptoms of its operation are manifest, and then, and not before, should the daily increase be suspended or diminished. In no other manner is it possible to have any assurance that the preparation employed is really active. See *Journal of Materia Medica*, vol. 4.

Antidotes.—Vinegar is recommended as an antidote. The stomach to be properly evacuated before administering it.

Incompatibles.—Strong acids, alkalies, tannin, &c.

PREPARATIONS.

Fluid Extract,	Dose, 5 to 20 drops.
Solid "	" $\frac{1}{2}$ to 1 $\frac{1}{2}$ grains.
Pills of Conium, $\frac{1}{2}$ grain,	" 2 to 6.
" " $\frac{1}{2}$ "	" 1 to 8.
" " 1 "	" 1 to 2.
" " and Ipecac, (U. S. P.) 1 grain, ...	" 8 to 5.

Convallaria Multiflora.

(*Giant Solomon's Seal.*)

Tonic, mucilaginous and mildly astringent. Valuable in leucorrhœa, menorrhagia, female debility and pectoral affections, also in piles. It will be found of great efficacy in irritable conditions of the intestines, as well as in chronic inflammation of these parts. Useful in the treatment of erysipelas and cutaneous affections. A large dose will produce emesis and act as a cathartic.

PREPARATION.

Fluid Extract,	Dose, 2 to 6 drams.
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Coptis Trifolia.(*Gold Thread.*)

Simple tonic bitter. Closely resembling quassia in properties, and is used when a pure, simple, tonic bitter is desired. Also as a local application in aphthous, and other ulcerations of the mouth. Also very useful in atonic dyspepsia, and loss of appetite. See Journal of Materia Medica, vol. 2.

PREPARATION.

Fluid Extract, Dose, $\frac{1}{4}$ to 1 dram.

Cornus Florida.(*Boxwood.*)

This well-known plant possesses tonic and anti-intermittent properties, very nearly allied to those of *cinchona*; in periodic fevers, it is one of our most valuable indigenous plants. Dr. Gregg states that, "after employing it for twenty-three years in the treatment of intermittent fevers, he was satisfied that it was not inferior to Peruvian Bark." Prof. BARTON says: "It may be asserted with entire safety, that as yet there has not been discovered within the limits of the United States, any vegetable so effectually to answer the purpose of *Peruvian bark* in the management of intermittent fevers, as *cornus florida*." EBERLE states that thirty-five grains of boxwood bark are equal to thirty of cinchona.

It may be used in all cases where *quinia* is indicated and can not be administered, owing to idiosyncrasy, &c., or when it can not be obtained pure. Its internal use increases the force and frequency of the pulse, and elevates the temperature of the body. It may be used with advantage in all cases where tonics are required, in periodical fevers, typhoid fevers, &c. The *cornin* is much used as a substitute for *quinia*, and may be variously combined with *xanthoxylin*, *myricin*, *salicin*, *hydrastin*, *podophyllin*, or extract of *cimicifuga*, in the different affections for which it is administered. See Journal of Materia Medica, vol. 1.

PREPARATIONS.

Fluid Extract,	Dose, $\frac{1}{4}$ to 2 drams.
Solid "	" 5 to 10 grains.
Cornin,	" 1 to 10 "
Pills of Extract of Cornus, 2 grains,	" 2 to 5.
" Cornin, 2 grains,	" 1 to 5.

Corydalis Formosa.(*Turkey Corn.*)

Tonic, diuretic, and alterative. The remedial properties of this plant are held in very high repute by all Eclectic practitioners. With

tonic powers of great value, it combines energetic alterative and resolvent powers. It has been employed with marked success in the treatment of syphilis, with *podophyllin*. Its use in such cases should be persevered in, and occasionally alternated with *stillin-gia*, *phytolaccin*, or other alteratives. In cases of cutaneous affections, its use is reputed as highly satisfactory. In scrofula, particularly when accompanied with feeble digestion and poverty of the blood it is highly recommended; also for dropsy, general debility, gravel, in affections of the urinary organs, in atonic gleet, passive leucorrhœa, catarrhal affections of the bladder, incontinence of urine, it is reported as serviceable.

PREPARATIONS.

Fluid Extract,.....Dose, 10 to 40 drops.
Corydalin,..... ' ½ to 1 grain.

Crocus Sativus.

(Saffron.)

Saffron is cordial, anodyne, emmenagogue and diaphoretic. In moderate doses, it stimulates the stomach, and in large quantities it excites the vascular system; moreover, it seems to have a specific influence on the cerebro-spinal system, as it affects, it is said, the mental faculties. It is frequently used to assist, in eruption of exanthematous diseases. Has been of benefit in amenorrhœa, dysmenorrhœa, chlorosis, hysteria, and in suppression of the lochial discharge.

PREPARATION.

Fluid Extract,.....Dose, 20 to 60 drops.

Croton Eleuteria.

(Cascarilla.)

Aromatic and tonic, employed when a pleasant and gently stimulant tonic is desirable; as in dyspepsia, chronic diarrhea and dysentery, flatulent colic, and other cases of debility of the stomach and bowels. It is sometimes advantageously combined with the more powerful bitters. Cascarilla counteracts the tendency of *cinchona* to produce nausea.

Incompatibles.—Lime water, sulphate of iron and zinc. Infusions containing tannic or gallic acid.

PREPARATION.

Fluid Extract,Dose, 20 to 60 drops.

Cucumis Colocynthis.

(*Colocynth.*)

Hydragogue cathartic. It is employed in passive dropsy, in cerebral derangements, and for the purpose of overcoming torpid conditions of the biliary and digestive system. Its irritant effect upon the rectum may influence the uterus by sympathy of contiguity, and thus provoke menstruation. It may be used in moderate doses in all diseases where catharsis is indicated. The addition of extract of *hyoscyamus* will deprive it of its harsh and griping effect.

Incompatibles.—Fixed alkalies, sulphate of iron, nitrate of silver, acetate of lead, &c.

PREPARATIONS.

Fluid	Extract Colocynth.	.....	Dose, 5 to 13 drops.
Solid	"	Used in compounds.....	
"	"	Compound.....	Dose, 2 to 30 grains
Pills of	"	and Blue Pill, 3 grains,...	" 2 to 3.
"	"	" Calomel, 3 grs., ...	" 2 to 3.
"	"	3 grains,	" 2 to 6.
"	"	and Hyoscyamus (U. S. P.),	
"	"	3 grains,.....	" 1 to 6.
"	"	and Podophyllin, 3 grs.,...	" 1 to 2.
"	"	and Ipecac, 3 grains,....	" 3 to 5.

Curcuma Longa

(*Turmeric.*)

Stimulant aromatic tonic; used especially in jaundice and the itch; also employed in debilitated states of the stomach, intermittent fever, and dropsy.

PREPARATION.

Fluid Extract,	Dose, 2 to 3 drams.
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Cypripedium Pubescens.

(*Ladies' Slipper.*)

Tonic, diaphoretic, sedative, nervine, slightly narcotic, and anti-spasmodic. Useful in hysteria, chorea, nervous headache, and all cases of nervous irritability. Dr. R. P. STEVENS considered it quite equal to *valerian*. Dr. IVES employed it in a variety of nervous diseases, and has known it to cure epilepsy. The complaints especially mentioned by him are hypochondriasis, neuralgia, and morbid sensitiveness of the nervous system generally, especially of the eye. It is held in high estimation in some parts, in domestic practice, as a sedative and anti-spasmodic.

The cypripedin is a good substitute for English *valerian*, and

is preferred by some. Employed in some neuralgic affections, hysteria and a deranged condition of the whole nervous system. Produces sleep, without any stupefying effect. It is often more beneficial upon the nervous system than *hyoscyamus*, *strychnine* and other narcotics, producing relief when they will not. Excellent in allaying intestinal irritation, when unaccompanied by active inflammation. Advantageously combined with extract of *lettuce*.

PREPARATIONS.

Fluid Extract,	Dose, $\frac{1}{4}$ to 1 dram.
Solid "	" 4 to 15 grains.
Cypripedin,	" 2 to 4 "
Pills of Extract Cypripedium, 2 grains,	" 2 to 6.

Datura Stramonium.

(*Thorn Apple*.)

A well-known anodyne, narcotic, and anti-spasmodic. The properties of *datura* resemble those of *atropia*. In long continued or large doses, stramonium causes dilatation of the pupil; also if the extract is applied to the eyebrows or temples—great disturbance of the cerebral functions, delirium and death. It will often act as an anodyne and narcotic when *opium* and *belladonna* fail. Dr. CHAPMAN regards this agent as more efficacious in melancholia than in any other form of mental derangement. Dr. WOODARD, late superintendent of the Massachusetts Lunatic Hospital, regarded stramonium as of essential service in the treatment of insanity with epilepsy. Dr. BURROWS found one grain of the extract to produce sleep in furious mania, when other narcotics had failed. Of fifty-five cases collected by Dr. BAYLE, a majority were benefited by its use.

Epilepsy.—Dr. FISHER found it useful in those cases which are diurnal or have regular returns. Dr. ARCHER, of Maryland, celebrated its virtues in this disease, more than half a century ago. Dr. TULLY prescribed it for epilepsy with more confidence than any other article in the *materia medica*. He directs this class of patients to continue its use, for months after the paroxysms are suspended, as a prophylactic. The patient should be fully under its influence; the effect upon the pupil should be the test; and if kept dilated for a year, they would return to their normal size by suspending the medicine. Most patients require some preparation of *iron* in the treatment of this disease.

Chorea.—Dr. FROST relates the case of a young lady who was cured in six weeks of chorea; and the experience of a large number of physicians is that no single remedy will be found equal to it in this disease. It will be found advantageous to combine purga-

tives, or give it in conjunction with iron, oxide of zinc, opium, cannabis, cimicifuga &c.,

Dr. KING, of Suffield, Conn., has reported two cases which he regarded as meningitis, the cure of which was evidently due to stramonium.

Spasmodic Asthma.—Dr. BIGELOW says: "It would not be difficult to designate individuals in Boston and vicinity, who are in the habit of employing stramonium with unfailing relief in the paroxysms of this distressing complaint." Pages might be filled showing the importance of this drug in the treatment of asthma, and scores of names of physicians in this country and Europe might be cited as recommending its use.

Abortion.—JOHN KING, M. D., says that it is superior to anything else for preventing abortion. Its efficacy has been tested in a number of instances.

Dysmenorrhœa.—EBERLE says by exhibiting from twenty to thirty drops of the officinal tincture, three times a day for two or three days, immediately preceding the period of the menses, the distressing pain attending this period will, in some instances, be entirely prevented. He has known it effect a perfect cure. Dr. A. T. THOMPSON found half-grain doses of the extract in combination with *Plummer's pill* and *digitalis*, extremely useful in the same affection. Dr. CHAPMAN used it successfully in this disease.

Retention of Urine.—If it depend upon inflammation about the neck of the bladder, it may sometimes be overcome without catheterism, by applying the extract with moist heat externally. Good results have followed its application in urethral stricture.

Rheumatism.—Many authors might be cited if necessary in confirmation of its efficacy in this complaint, both internally and externally. M. TROUSSEAU declares that he has derived advantages from stramonium in rheumatism, which no other agent appeared capable of affording. Dr. STILLE remarks: "There is no reason why, in external applications at least, stramonium should not take the place of more expensive and often less pure narcotics, in the treatment of every kind of painful affection. So common, and at the same time so powerful an agent, deserves more attention from American physicians than it has hitherto received and of which any published evidence can be found."

Hemorrhoids.—Among the local uses of stramonium, none equals it, in imparting comfort, so much as its employment in piles, and other kindred affections of the rectum. An ointment composed of the extract of stramonium and lead cerate in equal parts is an almost infallible remedy for the intolerable itching and burning which piles, vermicular ascarides, etc., occasion; it forms also, a very soothing application in fissure of the anus; also in nympho-

mania, in form of ointment, to lessen venereal excitement. See Journal of Materia Medica, vol. 2, and 4.

Antidotes.—Evacuation of the stomach by emetics or stomach pump, after which, vinegar and water may be administered, followed by mucilaginous drinks, with strong coffee, and other stimulating cordial, according to the prostration.

Incompatibles.—Caustic, fixed alkalies, or soda and potash; as they have been known to destroy its narcotic powers.

PREPARATIONS.

Fluid Extract.....	Dose, 2 to 10 drops.
Solid ".....	" $\frac{1}{4}$ to 1 grain.
Pills, $\frac{1}{4}$ grain.....	" 1 to 2.
" 1 ".....	" 1 to 2.

Digitalis Purpurea.

(Foxglove.)

It possesses narcotic, diuretic, and sedative properties; and is one of the most valuable known medicines for the purpose of reducing the action of the heart, for producing action of the absorbents, as a diuretic, and for producing specific action over the cerebro-spinal system.

THERAPEUTIC USES.—In dropsy, ascites, anasarca, and hydrothorax, it has proved a powerful and efficacious remedy, particularly if combined with *mercury*, *squills*, and the *sesqui-carbonate of ammonia*. The fluid extract in such cases should be made into an infusion. It is more serviceable in dropsy arising from disease of the liver and other viscera.

Dropsy after Fever.—In chronic dropsical affections, in anasarca, and cedema, attended with debility, and occurring after scarlet fever, Dr. HOLLAND considers it would be difficult to find any single combination more effectual than *digitalis* and *tinct. ferri sesqui-chloridi*. In diseases of the heart it is a remedy of great value. Dr. MUNK considers that it acts upon the heart in two ways: by depressing the circulatory action, and as an anti-spasmodic. When hypertrophy of the heart exists, whether complicated with other diseases or not, it exercises a powerful and beneficial depressing action. When there is an irritable state of the heart, attended with palpitations, irregularity, &c., it exercises its anti-spasmodic power.

In aneurism, Dr. HOPE found it eminently useful.

In asthma, connected with disease of the heart, in spasmodic asthma, it has proved of excellent service. In insanity and mania it is advised by a large number of physicians. In the Medical Times and Gazette, Dr. FRANCIS E. CAVEY, of Guernsey, mentions several cases of delirium tremens successfully treated with

digitalis, after entire failure of the opium treatment. He gave the tincture in half-ounce doses, with an equal quantity of gin, and in every case found one dose sufficient.

In epilepsy, and epileptic mania, it has been used with decided effect.

Dr. PEREIRA considers that the danger of its accumulatory effects in the system, has been over-stated, and Dr. GARROD explains its cumulative character as follows: "That considerable weakening of the heart's action may occur without any very evident symptom being produced; but if this is increased above a certain point, so as to interfere with the efficiency of the circulation, then all the symptoms are likely to be rapidly and dangerously manifested. It possesses a two-fold action: the one a sedative, the other, diuretic. These two actions are said never to occur simultaneously; if it acts as a sedative, it produces no diuresis, and *vice versa*; and if either of these effects be obtained in a kindly manner, the patient may be considered safe from any dangerous effects."

The active principle, *digitalin*, is much used in the same cases where *digitalis* has been recommended—in doses from $\frac{1}{6}$ to $\frac{1}{2}$ of a grain. It is one of those remedies which should not be administered without an accurate knowledge of their properties. See, Journal of Materia Medica, vol. 4, and 5.

Antidotes.—Its poisonous effects are best counteracted by a speedy evacuation of the stomach by warm drinks together with sinapisms to wrists and ankles. The emesis should be followed by a free use of wine, brandy, ammonia, and other stimulants.

Incompatibles.—Salts of iron and lead; tannin, and vegetable astringents.

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 10 drops.
Solid ".....	" $\frac{1}{4}$ to 1 grain
Pills of Digitalin, $\frac{3}{4}$ grain	" 1 to 2.
" Extract Digitalis, $\frac{1}{2}$ grain	" 1 to 3.
" " " and Squill, U. S. P., 2 grs.,	" 2 to 4.

Dioscorea Villosa.

(Wild Yam.)

Anti-spasmodic. It is represented as very efficacious in bilious colic, efficient, in itself, to control the most severe and obstinate attacks of this disease, giving prompt and permanent relief. It will also allay nausea, cramps and painful spasmodic affections of the bowels. The tincture is said to be a valuable expectorant and diaphoretic.

The active principle, dioscorein, says Dr. King, is as much a specific in bilious colic, as quinia in intermittents. Four grains of dioscorein, in one tablespoonful of brandy, are reported by the same author, to have given prompt relief in an obstinate case, which was pronounced hopeless by several physicians, and repeated once after an interim of about twenty minutes, to have effected a permanent cure. The extract of *wild yam* combined with the extract of *cornus* proves eminently serviceable in nausea and vomiting of pregnant women. Combined with the extract of *ginger* and *asclepidin* it is recommended useful in flatulency.

PREPARATIONS.

Fluid Extract: Dose 5 to 30 drops.
 Dioscorein: " 1 to 4 grains.

Dipterix Odorata.

(Tonqua.)

Tonqua bean is the fruit or seed of a large tree indigenous to the province of Guiana. The bean has a strong, agreeable, aromatic odor, and a bitterish, aromatic taste.

The tonqua bean is employed chiefly to flavor other medicines, and for perfumery.

PREPARATION.

Fluid Extract: To be used at discretion.

Epigæa Repens.

(Trailing Arbutus.—Gravel Plant.)

Diuretic and astringent.

It proves highly beneficial in lithic acid gravel and all diseases of the urinary organs. This plant possesses properties allied to those of the *uva ursi*—acting in an especial manner on the kidneys and the membranes of the bladder and urethra. It is thought to have emmenagogue properties in cases of amenorrhœa occurring in scrofulous constitutions. When the *uva ursi* and *buchu* have produced unpleasant symptoms, in cases of irritated action of the bladder and urethra, the *arbutus* has produced an alleviation of the symptoms, and sometimes entire removal of the disease. It has been recommended as a remedy peculiarly adapted for the cure of Bright's disease of the kidneys, or any disease accompanied with albuminous urine. A case of *anasarca* and *ascites*, with cough, was treated with *digitalis*, *squill*, *terebinthinates*, *asclepias*, and the *spirits of nitrous*

ether, without benefit. The urine was found to contain a great quantity of albumen. The patient was put upon the free use of the decoction of the *arbutus*, to the rejection of all other medicines; the albumen soon disappeared from the urine, and the patient recovered.

It is pronounced by many superior to *uva ursi*, or *foreign buchu*, and to succeed in producing the desired effect, when these have signally failed. Its anti-lithic properties are of a passive, rather than an active character, preventing the accumulation of principles calculated to produce a precipitation of calculous matter. The fluid extract is recommended by Dr. King as an elegant preparation in all urinary difficulties. It is sometimes employed with advantage in diarrhoea and bowel complaints of children.

PREPARATION.

Fluid Extract..... Dose, 1 to 2 drams.

Erechthites Hieracifolius.

(*Fire Weed*.)

Tonic, astringent, and alterative. Has reputation in diseases of the mucous tissues of the lungs, stomach, and bowels, in the treatment of cholera and dysentery, and in the summer complaints of children. In large doses it acts as an acrid emetic-cathartic. It seems to possess analogous properties with *erigeron*, *turpentine*, and *copaiba*. It acts as a powerful irritant to the mucous membrane of the digestive and urinary organs, and in the same manner upon the blood vessels. A spiritous extract has been highly recommended by Dr. WYETH, in the treatment of cholera and dysentery; in the latter disease, promptly arresting the muco-gangrenous discharges, relieving pain, and effecting a speedy cure. It has long had a popular confidence as almost a specific for all active hemorrhages. It has also been found useful in spasms of stomach and bowels, hysteria, and diarrhoea of pregnant females.

PREPARATION.

Fluid Extract..... Dose, $\frac{1}{4}$ to 1 dram.

Euonymus Atropurpureus.

(*Wahoo*.)

This plant is spoken of as possessing tonic, hydragogue, diuretic and anti-periodic virtues. Dr. Twyman, of Missouri, says he has found the effects of this drug resemble those of rhubarb, rather than of a hydragogue, and recommends its use as an alterative, in hepatic derangements. It has been employed with very favorable

results in dropsy, in which complaint the fluid extract forms a convenient preparation. The mildness and different properties of this plant indicate its use in several functional disturbances. See *Journal of Materia Medica*, vol. 2.

PREPARATION.

Fluid Extract, Dose, 1 to 2 drams.

Eupatorium Perfoliatum.

(*Boneset.*)

A warm infusion, prepared from the fluid extract of this plant, is emetic, sudorific, and diaphoretic; the cold infusion is a tonic and febrifuge. It has been repeatedly prescribed with advantage in rheumatism, typhoid pneumonia, catarrhs, dropsy, and many forms of fever. This plant is extensively employed by the negroes on the Southern plantations as a tonic and diaphoretic in colds and fevers, and in the typhoid pneumonia so prevalent among them. Says PORCHER: "In a few cases which have come under my observation, we have found this and the *polygala senega* convenient and useful prescriptions in this disease: the latter, with *tartar emetic solution*, to promote expectoration; and the former, with *flaxseed tea*, as a stimulant diaphoretic; combining them with spirits of turpentine, when it has assumed a typhoid form." From its action on the capillaries, it has been recommended in chronic cutaneous diseases.

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 2 drams.
Solid "	" 5 to 20 grains.
Eupatorin	" 1 to 2 "
Pills, 2 grains	" 2 to 6.

Eupatorium Purpureum.

(*Queen of the Meadow.*)

The root is bitter, astringent, stimulant, and powerfully diuretic. Useful in all diseases of the urinary organs, dropsy, rheumatism, gout, and female weaknesses and obstructions. It is thought by some to be a solvent of the stone, and esteemed an unfailing remedy in gravelly complaints.

Dr. SCUDDER writes: "There is no doubt but what this agent exerts a specific influence upon the kidneys, increasing the quantity of urine secreted, and, to some degree, the amount of solids excreted in it. It has been employed in atonic dropsies, chronic nephritis, catarrhus vesicæ attended with ulceration; chronic irri-

tation of the bladder attended with increased mucous secretion. It has also been successfully employed in hæmaturia, gleet, leucorrhœa and other forms of female weakness, and in rheumatism and gout. It is a popular remedy in gravel, and said by some to possess solvent powers; although we can not award it any positive powers of that kind, yet, as it increases the amount of water excreted, which is acknowledged to be the best solvent for stone, and always allays irritation of the bladder, we must consider it at least the equal of *uva ursi* and *chimaphila*. We have used the *eupurpurin*, and consider it among our most efficient curative agents in diseases of the kidneys, bladder and urethra. In one case of marked *albuminuria*, when other agents had failed to produce any relief, the continued use of this remedy for two weeks entirely relieved the patient. In two cases of *diabetes insipidus*, its use was attended with the same results. We have also employed it in *incontinence of urine*, especially in children, with good effects. It is of the most importance, however, in allaying irritation of the bladder; in many cases of this kind caused by displacement or chronic inflammation of the uterus, or arising during or after pregnancy, we have obtained more benefit from its use than any other agent."

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 8 drams.
Eupurpurin.....	" 8 to 4 grains.

Galium Aparine.

(Cleavers.)

A valuable refrigerant and diuretic, possessing aperient and anti-scorbutic properties. Has been used in dropsy, congestion of spleen and scrofula. It will be found very beneficial in many diseases of the urinary organs, suppression of urine, gravel, calculus, nephritis, inflammation of the bladder, and burning pain accompanying micturition in gonorrhea.

Contra-indications.—Diseases of a passive character on account of its refrigerant and sedative effects on the system, but may be used in fevers and all acute diseases.

PREPARATION.

Fluid Extract.....	Dose, 1 to 2 drams.
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Gaultheria Procumbens.

(Wintergreen.)

Wintergreen is aromatic, stimulant, and astringent. It has been

employed with benefit in chronic mucous discharges, in dysentery, amenorrhea, and other fluxes, and with a view of increasing lactation. The chief use is to impart an agreeable flavor to unpalatable syrups and other preparations. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract Dose, 1 to 2 drams

Gelseminum Sempervirens.

(*Yellow Jessamine.*)

Nervine, anti-spasmodic, febrifuge, and by some claimed to be narcotic. Efficacious in nervous and bilious headache, colds, pneumonia, hemorrhages, leucorrhea, chorea, ague-cake, and in fevers. Some recommend its use in acute rheumatism and in pleurisy. In convulsions, its effects have been very satisfactory. It reduces the circulation and frequency of respirations, promotes perspiration and the secretions generally, and while it relaxes all the muscles, it relieves, by its action on the general system, all sense of pain.—(Dr. J. A. MAYES.) It is said to be capable of subduing, in from two to twenty-four hours, and without the least possible injury to the patient, the most formidable and complicated fevers incident to our climate, quieting nervous irritability and excitement, equalizing the circulation, promoting perspiration and rectifying the secretions without nausea, vomiting or purging, and is also adapted to all stages of disease.

The gelseminum possesses a most perfect control over the nervous system, and is an unrivalled febrifuge, which appears to depend upon its relaxing and spasmodic properties. "Its physiological effects are dimness of the vision, double-sightedness, inability to open the eyelids, stiffness of the jaws, general muscular debility, and complete prostration. These soon pass off, however, on withholding its use, leaving the patient comfortable and refreshed."—A. M. NASH. "It will suspend and hold in check muscular irritability and nervous excitement, with more force and power than any known remedy. It performs its wonder-working cures, in all febrile diseases, without exciting either nausea, vomiting, or purging. When enough has been given to produce its specific effect, the eye is dimmed, the vision clouded and doubled, the head light and dizzy. There is danger of carrying it to such an extent as to suspend involuntary muscular action, and when this is the case, death must ensue."—F. D. HILL. "It may be used in all species of fevers, nervous and bilious headache, colds, pneumonia, ague-cake, asthma, chronic rheumatism, and many other diseases, though it is in fevers, especially, in which its

efficacy has been mostly observed." Dr. MILLER writes: "I am perfectly satisfied that gelseminum will cut short typhoid fever, when given early in the disease, and even when of ten days' standing." Dr. MCGILL writes: "In typhoid pneumonia I alter-nate the *gelseminum* with *quinine* and *capsicum*, and have never known it to fail in affording permanent relief." The active principle, *gelseminin*, satisfies all the indications of the plant, and is especially adapted to be used as an adjuvant to other medicines, or with them in combination. It is a remedy that should be given with care.

For a full statement of its physiological and medicinal properties, with cases in practice where it has been used, see Journal of Ma-teria Medica, for 1858, 1860, and 1866.

Antidotes.—When an over-dose has been taken, the proper anti-dotes are brandy, quinine, or arom. spts. of ammonia, and when indicated, tinct. opii.

PREPARATIONS.

Fluid Extract.....	Dose, 3 to 20 drops.
Gelseminin.....	" ½ to 2 grains.

Gentiana Lutea.

(*Gentian.*)

Gentian possesses, in a high degree, the tonic powers which characterize the simple bitters. It excites the appetite, invigorates digestion, moderately increases the temperature of the body and the force of the circulation, and operates, in fact, as a general corroborant. It acts without causing any astringency; indeed, is occasionally laxative. It may be used in all cases of pure debility of the digestive organs, or where a general tonic impression is required. Dyspepsia, gout, amenorrhoea, hysteria, scrofula, intermittent fevers, diarrhea, worms, are among the many affections in which it proves useful; but it is the condition of the stomach and the system generally, not the name of the disease, which must be taken into consideration in prescribing it.

Gentian Compound.

This preparation is composed of *gentian*, *orange peel*, *cloves*, *canella* and *red saunders*. An agreeable tonic, pleasant to the taste, seldom proving obnoxious to the stomach. The medicinal virtues of the several ingredients of this compound are too well known to need any lengthy notice. See Journal of Materia Medica, vol. 2.

Contra-indications.—Febrile disorders. Inflammatory conditions of the gastro-intestinal membrane.

PREPARATIONS.

Fluid Extract of Gentian.....	Dose, $\frac{1}{4}$ to 1 dram.
“ “ “ Compound.....	“ $\frac{1}{4}$ to 1 “
Solid “ “	“ 8 to 15 grains.
Pills, “ “ 2 grains.....	“ 2 to 6.
“ of Gentian Compound, 4 grs.....	“ 1 to 5.

Geranium Maculatum.

(Cranesbill.)

Astringent and tonic. As an astringent it contains considerably more tannin than kino, and may be employed in all cases where astringents are indicated. It is a superior agent in the first stages of dysentery, diarrhea, and cholera morbus. It is efficacious in the treatment of hemorrhages, hematuria, menorrhagia, leucorrhœa, gleet, diabetes, &c. The tincture is an excellent local application in sore throat and ulceration of the mouth. In colliquative diarrhea it answers an excellent purpose, either alone or in combination with quinine. It may be applied to ulcers externally, and in combination with *alum* and *gum arabic*, it is a good application to bleeding wounds and in epistaxis. Good as a wash and gargle in relaxation of the uvula, and affections of the mouth and throat, as well as an injection in leucorrhœa and gleet. The absence of unpleasant taste, and of all other offensive qualities, renders it peculiarly serviceable in the cases of infants, and of persons of delicate stomachs. See Journal of Materia Medica, 1859.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{4}$ to 1 dram.
Solid “	“ 8 to 15 grains.
Geraniin	“ 1 to 5 “
Pills of Geraniin, 1 grain.....	“ 1 to 5.
“ Extract Geranium, 2 grains	“ 2 to 6.

Geum Rivale.

(Aven's Root.)

Tonic and astringent. There is a great variety of diseases which are beneficially treated by this agent. The success which so uniformly attends its use, places its rank high in therapeutics. Among the functional and organic derangements in which its employment is indicated, are passive and chronic hemorrhages, chronic diarrhea and dysentery, dyspepsia, leucorrhœa, congestion of the abdominal viscera, intermittents, &c. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract.....	Dose, $\frac{1}{4}$ to 1 dram.
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Gillenia Trifoliata.*(Indian Physic.)*

Emetic, cathartic, sudorific, and expectorant. In small doses it is tonic and deobstruent, resembles ipecac in its mode of action. This agent has been used with considerable success in amenorrhea, rheumatism, dropsy, habitual costiveness, dyspepsia, worms and in intermittents. In all cases where the object is to produce emesis, it is recommended as a safe and efficacious medicine. In large and oft repeated doses, it may cause hyperemesis and hypercatharsis. Particularly spoken of as a tonic in torpid conditions of the stomach.

PREPARATION.

Fluid Extract.....Dose, 4 to 12 drops.

Glycyrrhiza Glabra.*(Liquorice.)*

Liquorice is an agreeable demulcent and expectorant. The extract is widely employed as a corrigent in the preparation of many unpalatable medicines. It is a palatable, pleasant, as well as a remedial drug, in catarrhal affections of the throat, coughs, hoarseness, pulmonary and hectic cases attended with thirst. In bronchial affections it is particularly recommended as useful.

PREPARATION.

Fluid Extract.....Dose, 1 to 4 drams.

Gossypium Herbaceum.*(Cotton Root.)*

The emmenagogue property is its characteristic, acting with as much efficiency and more safety than ergot; operating without pain or gastric disturbance; producing no other effect than the excitation of the menstrual secretion, excepting, perhaps, some degree of anodyne influence.

Mr. Shaw, of Tennessee, writing to the *Nashville Journal*, says: "I consider this root one of the very best emmenagogues of the materia medica, and I think it should be so classed. It produces the most salutary effect in dysmenorrhea; it acts as an anodyne in allaying the pain, and as an emmenagogue in aiding or augmenting menstruation; its action is very speedy; after its exhibition in this case, it produces an effect which, indeed, appears almost natural, that is, almost without pain; the patient, after its exhib-

ition, feels but little inconvenience from pain, which soon subsides, and menstruation is immediately augmented, without acceleration of the pulse or gastric uneasiness. There are few other emmenagogues that can claim this feature.

"As a *parturient agent*, I think it superior to ergot in one sense of the word, and in another, about its equal—its action being about as prompt as that of ergot, and attended with much less danger. It causes neither gastric distress, nor acceleration of the pulse; if it does, it is not perceptible; both of which are occasioned by ergot to some extent.

"I have witnessed its action in retained placenta with good effect, which was an expulsion of the mass in about twenty minutes after the exhibition of the first dose. It may be proper to say, that I gave two doses before the placenta was thrown off. I believe it to be safer as a *parturient agent* or an *emmenagogue*, or at least as safe, as any other article of the *materia medica*."

Dr. BONCHELLE regarded it as an excellent *emmenagogue*, and not inferior to ergot in promoting uterine contraction. He stated that it was habitually and effectually resorted to by the slaves of the South for producing abortion, and this too, without seriously affecting the general health.

"*Tincture of the cotton root as a tonic*.—There is a condition of the system, in which this tincture acts as a valuable restorative. These cases are of a leuco-phlegmatic temperament of both sexes, but it is to the female sex that I wish to draw the attention of the reader. Where there is general bad health, accompanied with tardy menstruation, I have used it with the happiest effect; in a few cases of *emansio mensium*, caused by *anæmia*, where the patient was troubled with pains in the loins and giddiness of the head, with a derangement of the digestive organs, such as *anorexia*, accompanied with an uneasy depressed feeling at the *scrobiculus cordis*, every month, which was promptly relieved by the tincture, but not with the effect of producing the menstrual flux, which was afterwards produced by the decoction, I find it necessary to continue the tincture from two to four weeks."

The danger in administering ergot prevents its use, even when its specific effects seem to be called for. If these specific effects can be obtained by the use of the cotton root, and this too, without liability of injury to the general system—and these have been attributed to it—the profession would do well to give it a thorough and extensive trial. See *Journal of Materia Medica*, vol. 3 and 6.

PREPARATION.

Fluid Extract, Dose, 2 to 4 drams

Hæmatoxylon Campechianum.*(Logwood.)*

Tonic and astringent, without any irritating properties. It does not constipate nor so readily disorder the digestive organs as many other astringents, hence its use may be continued for a longer period. It may be employed as an astringent to control diarrhea and other fluxes, hemorrhages and excessive night sweats. The mildness of this drug gives it a preference over many others in the treatment of the diarrheas of children.

When the constitution is broken down by disease, dissipation or the excessive use of mercury, the extract of logwood, used freely in connection with other treatment, will be found highly beneficial. In chronic diarrheas and dysenteries, it not only gives tone to the digestive organs, but to the system generally. Dr. Percival employed it to restrain profuse sweating in phthisis. Dr. Churchill speaks favorably of logwood both as an internal and local application in the treatment of leucorrhea, mentioning many cases of improvement and recovery. In cancer and gangrene an ointment of the extract (*Ext. Hæm., Adipis 3 ss*), proves serviceable.

Incompatibles.—Mineral acids, alum, sulphates of iron and copper, tartar emetic, acetate of lead.

PREPARATIONS.

Fluid Extract,	Dose $\frac{1}{2}$ to 1 dram.
Solid "	" 5 to 80 grains.
Pills, " 2 grains	" 2 to 6.

Hamamelis Virginica.*(Witch Hazel.)*

Tonic, astringent, sedative and discutient. Witch hazel is used in hemoptysis, hematemesis, and other hemorrhages, as well as in dysentery, diarrhea and excessive mucous discharges. In incipient phthisis it exercises a palliative and beneficial influence. It is said to be very efficient, in the form of a wash, in external inflammations, painful tumors, hemorrhoidal affections, and ophthalmias. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract,	Dose, 1 to 2 drams.
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Helianthemum Canadense.*(Frostwort.)*

Astringent, aromatic bitter tonic, and highly anti-scorfulous.

The latter property has chiefly given it a remedial value and reputation. Dr. Ives of New Haven, Ct., recommends it to the profession as eminently serviceable in the treatment of scrofula. The late Dr. Parish, Philadelphia, has employed it, internally, with good success in scrofulous affections of the eyes. Dr. Tyler, of New Haven, Ct., published a pamphlet, in which he states, he found it very reliable in scrofula, diarrhea, and secondary syphilis, as a gargle in scarlatina, and a wash in prurigo.

It may be used in form of syrup, decoction or fluid extract. The latter preparation is pronounced the best.

PREPARATION.

Fluid Extract.....Dose, 1 to 2 drams.

Helleborus Niger.

(*Black Hellebore.*)

Black hellebore is a drastic hydragogue, possessed of emmenagogue powers, which by some are ascribed to a specific tendency to the uterus, by others are supposed to depend solely on the purgative property. In over-doses it produces inflammation of the gastric and intestinal mucous membranes, with violent vomiting, hypercatharsis, vertigo, cramp, and convulsions, which sometimes end in death. In medicinal doses it is a drastic cathartic, diuretic, anthelmintic, and emmenagogue. This medicine was highly esteemed by the ancients, who employed it in mania, melancholy, amenorrhea, dropsy, epilepsy, various cutaneous affections, and verminous diseases. It is at present highly esteemed by some practitioners as an emmenagogue. Dr. Mead considered it superior to all other medicines belonging to this class.

PREPARATIONS.

Fluid Extract.....Dose, 10 to 20 drops.
Solid "....." 1 to 5 grains.
Pills, 1 grain....." 1 to 5.

Helonias Dioica.

(*Unicorn.*)

Tonic, diuretic and vermifuge. It is beneficial in dyspepsia, loss of appetite and colic. It exercises a marked curative influence on diseases of the uterus and its appendages, leucorrhea, amenorrhea, dysmenorrhea, and predisposition to miscarriage. Prof. Ives recommends it as efficient in checking nausea and vomiting. Ecboic properties have also been ascribed to this medicine.

Dr. Braman considers it particularly applicable to such disorders as have their origin in atony of the generative organs of the sexes, particularly the female. He praises its efficacy as follows: "In leucorrhea I consider it invaluable. I use it with a confidence I attach to no other medicine. Under its influence, the patient, whose life has been almost a burden, revives, her uncomfortable sensations vanish, and ultimately an entire recovery of health and strength is established. See Journal of Materia Medica, vol. 2.

PREPARATIONS.

Fluid Extract,.....	Dose, 1 to 2 drams.
Helonin,.....	" $\frac{1}{4}$ to 1 grain.

Hepatica Americana.

(*Liverwort*.)

Liverwort is a very mild demulcent tonic, and astringent. Supposed by some to possess diuretic and deobstruent virtues. It has been employed with success in lactic, hepatic and pulmonary complaints; and attracted considerable attention as a remedy in hemoptysis, and deep seated coughs. This drug may be administered with advantage in the incipient or convalescent stages of diarrhea and dysentery.

PREPARATION.

Fluid Extract,.....	Dose, 2 to 3 drams.
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Humulus Lupulus.

(*Hops*.)

Tonic, hypnotic, febrifuge, antilithic, and anthelmintic.

It has a tendency to produce sleep and relieve pain, and may be used when opiates are inadmissible. It has been highly recommended in diseases of general or local debility, associated with morbid vigilance, or other nervous derangement. The complaints in which it has been found most useful are dyspepsia, and the nervous tremors, wakefulness and the delirium of drunkards. It is thought to be a specific in removing asthmatic pains, without increasing the secretions. It is employed to allay the distressing symptoms of phthisis. It is given with good effect as a stomachic, in inappetency and weakness of the digestive organs. Sometimes it causes diuresis, and is said to correct lithic acid deposits. The *lupulin* is useful in after pains, to prevent chordee, to suppress venereal desires, and to allay the pain attendant on gonorrheal disease. It is used in delirium tremens, and watchfulness in connec-

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tion with nervous irritation, anxiety, or exhaustion; it does not disorder the stomach nor cause constipation, as does opium.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram.
Solid ".....	5 to 20 grains.
Lupulin,	" 6 to 10 "
Lupulin Pills, 3 grains.....	" 2 to 3.

Hydrangea Aborescens.*(Hydrangea.)*

Dr. Eoff says the leaves of hydrangea are tonic, sialagogue, cathartic and diuretic.

This plant was introduced to the notice of the profession by Dr. Butler, of Burlington, N. J., as a remedy for the removal of calculus, or gravelly deposits in the bladder. The effect the remedy seems capable of producing, is removing, by its own specific action from the bladder, such deposits as may be contained in that viscus, provided they are small enough to pass the urethra. It has seemed also to have the power of relieving the excruciating pain attendant on the passage of a calculus through the ureter. The power of curing stone in the bladder does not appear to be claimed for it; it is only when the deposits are small, when in that form of disease known as gravel, that it is an efficient remedy; then by removing the nucleus, which if allowed to remain in the organ, would increase in size and form stone, the disease is averted. In an over-dose it produces unpleasant symptoms, such as dizziness of the head, oppression of the chest, &c. The root appears to contain a large amount of mucilage, which serves as a valuable demulcent, and directly alleviates the excruciating pain which accompanies the passage of the calculi through the ureter, at the same time favoring the expulsive power of the bladder to free itself from foreign substances. Dr. Monkur, of Baltimore, says: "I regard the hydrangea, in properly selected cases, as sure in its remediate agency as we may express of any other medical substance." In the hospital he directed its use in mucous irritation of the bladder in aged people, chronic gleet, and, in a very difficult condition to cure, the prostrate mucous emissions; and the report was favorable to its use.

Dr. Bates has treated several cases of lithiasis with the hydrangea, and with the best success. In each case a number of calculi passed from the patient upon the use of this agent.

PREPARATION.

Fluid Extract.....	Dose, 1 to 2 drams.
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Hydrastis Canadensis.

(*Golden Seal.*)

Its principal medicinal quality is a powerful, bitter tonic, highly useful in all cases of debility and loss of appetite. In this respect it has an increasing reputation among medical writers. It appears to have a specific stimulating effect upon the mucous membrane beyond what would follow the use of a simple tonic. As a tonic it has been successfully used in dyspepsia, chronic affections of the mucous coats of the stomach, erysipelas, remittent and intermittent fevers, typhoid fever, torpor of the liver, and general cases requiring a tonic.

In chronic diarrhea and dysentery, combined with *geranium*, it has given satisfaction; also, in combination with *geranium* as a valuable injection in gleet, chronic gonorrhea, and leucorrhea; likewise in inflammation and ulceration of the internal coating of the bladder.

The active medical properties of the plant are due to a resinoid principle called *hydrastin*, and to an alkaloid principle called *hydrastina*.

The two principles appear, by the testimony of medical writers, who have given the subject attention, to possess somewhat different properties. In the associated state the effect should be the same as is observed from the use of the root. The resinoid possesses, to a larger extent, the tonic and all the laxative properties of the root, but does not seem to exercise the peculiar curative power over the ulcerated mucous surfaces, (which is one of the characteristics of the plant), as the alkaloid. To the alkaloid is due the anti-periodic properties of the plant. The two principles associated, and known as *neutral*, undoubtedly are better adapted to the general purposes for which the root would have been administered, and therefore to the general wants of the profession; but for those cases where the specific effect of the alkaloid is desired, it should be used alone, and free from any modifying effects other elements might produce. The alkaloid is of a beautiful yellow color, and as an anti-periodic, is claimed to be without an equal, excepting sulphate of quinine, and as having a much more extensive range of application, and possessing other virtues of great importance in the treatment of fevers.

The resinoid and alkaloid combined, possessing tonic and laxative properties, are indicated in the treatment of habitual costiveness, and are often, in chronic cases, combined with *leptandrin*, *xanthoxilin*, and *asclepidin*, administered in pills of two grains, taken every night. See Journal of Materia Medica, April, 1860.

PREPARATIONS.

Fluid Extract,.....	Dose, $\frac{1}{2}$ to 2 drams.
Solid ".....	" 2 to 5 grains.
Hydrastin (resinoid),.....	" $\frac{1}{2}$ to 5 "
" (neutral),.....	" 2 to 6 "
" (alkaloid),.....	" 1 to 5 "
Pills of Hydrastin, (neutral), 1 gr.,.....	" 2 to 6.
" Hydrastina, 1 gr.,.....	" 1 to 5.

Hyoscyamus Niger.

(Henbane.)

Henbane is a powerful narcotic. In medicinal doses it is anodyne, hypnotic, calmative and anti-spasmodic; allaying pain, soothing excitability, inducing sleep and arresting spasm. It does not produce constipation like opium, but has a tendency to act as a laxative. Used in chronic cough, irritation of the urinary organs and inflammatory cases attended with excitability; employed with advantage in painful spasmodic affections, hysteria, rheumatism and gout; also, combined with *colocynth*, in painters' colic and mania; it is also used externally to allay the irritation of very sensitive parts, and the infusion dropped into the eye, dilates the pupil like belladonna. It is employed as an anodyne, soporific, anti-spasmodic, and sedative, in cases where opium would disagree; it is also used in fomentations, as a topical sedative and anodyne. Neuralgic and spasmodic affections, rheumatism, gout, hysteria, and various pectoral diseases, as catarrh, pertussis, asthma, phthisis, &c., are among those in which it is most frequently prescribed. It is much used in connection with griping cathartics, the disagreeable effects of which it is thought to counteract.

Dr. Hall highly lauds this plant in the treatment of delirium and irritable condition of the nervous system dependent on the loss of blood. Dr. King remarks: "It is feeble as an anodyne, feebler as a soporific; but not poppy nor mandragora soothe so unexceptionably as henbane." In over-doses henbane is dangerously poisonous. It powerfully affects the brain, producing disordered vision, loss of speech, convulsions, arterial prostration, paralysis, distress in the bowels, and other hippocritical symptoms, which often prove fatal. See Journal of Materia Medica, vol. 1 and 4.

Antidotes.—Emetics, stomach-pump, stimulants, galvanism, and acids are the principal remedies to counteract its poisonous effects.

Incompatibles.—Acetate of lead, nitrate of silver, sulphate of iron, tannin, and the vegetable astringents.

PREPARATIONS.

Fluid Extract.....	Dose, 10 to 20 drops.
Solid ".....	" $\frac{1}{2}$ to 1 grain.
Hyoscyamin.....	" $\frac{1}{2}$ to $\frac{1}{4}$ "
Pills of Extract Hyoscyamus, $\frac{1}{2}$ grain.....	" 2 to 4.
" " $\frac{1}{2}$ ".....	" 1 to 2.
" " 1 ".....	" 1 to 2.

Hypericum Perforatum.

(Johnswort.)

Astringent, sedative and diuretic. Among the complaints for which it may be used are suppression of urine, chronic urinary affections, diarrhea, dysentery, worms, jaundice, menorrhagia, hysteria, nervous derangements, hemoptysis, and other hemorrhagea. It may be employed with advantage, externally, to dispel hard tumors, caked breasts, ecchymosis, etc.

Its medicinal agency was held in high repute, especially among the ancients; though, perhaps, chiefly regarded as a remedy in wounds and bruises, for which it was employed, both externally and internally. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract,.....Dose, $\frac{1}{2}$ to 1 dram.

Inula Helenium.

(Elecampane.)

Aromatic stimulant and tonic. It has also diuretic, diaphoretic, emmenagogue and expectorant properties. Formerly it was employed in complaints peculiar to females, and is now used considerably in amenorrhea.

The chief use of elecampane is in pulmonary affections, hepatic derangements, atonic state of the digestive organs, dyspepsia, and general debility. Its deobstruent properties have been widely recognized in its administration in chronic engorgement of the abdominal viscera, and dropsy, which so often follows.

Highly recommended, both as an external and internal application in tetter, psora, and other diseases of the skin.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.

Ipomœa Jalapa.

(Jalap.)

Cathartic. Jalap holds a place as a purgative between gamboge

and *senna*, and resembles *scammony* in its actions. The tendency of jalap to gripe and nauseate may be obviated by combining with the dose a grain or two of *camphor*, or three grains of *cloves*. Camphor is said not only to lessen the griping tendency, but also to augment its purgative operation. It is well adapted to relieve certain forms of constipation. In constipation depending upon atony of the intestines, *jalap*, in combination with a carminative or *calomel* may be given with advantage.

Many cases are on record to attest the virtues of jalap as a vermifuge for tape-worms, as well as lumbrici. As early as 1788 Block made use of this, in conjunction with other medicines, as a vermifuge. Bremser says that jalap is indisputably one of the most powerful and efficient purgatives, and one, which, perhaps, beyond all others, has the most decided anthelmintic property.

It is not equalled by any medicine of its class in the power of eradicating dropsical effusions, and of curing those independent of organic lesion. Combined with *bi-tartrate of potassa* it forms a safe and certain hydragogue cathartic.

In diseases of the brain, jalap is recommended on the principle of contra-irritation, to relieve the congestion. As a vermifuge, it is particularly well adapted for children. But for whatever indication it may be prescribed, more satisfactory results follow its administration, when it is combined with *calomel*. See Journal of Materia Medica, vol. 2.

Contra-indications.—Inflammation of the alimentary canal and pelvic organs. During pregnancy and the catamenial periods.

PREPARATIONS.

Fluid Extract	Dose, $\frac{1}{2}$ to 1 dram.
Solid "	" 3 to 8 grains.
Jalapin.	" 1 to 2 "

Iris Florentina.

(*Orris*.)

Possesses cathartic and diuretic properties, and in large doses acts as an emetic.

The earlier writers favor orris in the treatment of constipation, and atony of the digestive organs; in dropsical affections, and in purulent discharges from the urethral mucous membrane. It is pleasant to the taste, and forms an unobjectionable medicine. The root has been used to conceal obnoxious breath, and enters into the composition of many tooth powders. Chiefly employed now in compounds, on account of the pleasant odor it imparts.

PREPARATION.

Fluid Extract	To be used at discretion.
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Iris Versicolor.

(Blue Flag.)

Blue flag is cathartic, alterative, sialagogue, anthelmintic, and diuretic. Useful in dropsy, anasarca, hydrothorax, in chronic hepatic, renal and splenic affections. In scrofula and syphilis, whether primary or secondary, it acts as a powerful and efficacious agent, and may be used alone, or combined with *mandrake*, *poke*, *black cohosh*, and other alteratives. In chronic rheumatism, mercurio-syphilis, dyspepsia, tape-worm, gonorrhea, leucorrhœa, dysmenorrhea, and constipation, it has been used with positive advantage, either alone, or in combination with other agents. "The root of the blue flag extends its influence through every part of the system; in small doses, and repeated at short intervals, it seems to act more particularly on the glandular system, exciting them to a discharge of their respective offices; in large doses it evacuates and exhausts the system, acting on the liver, and the alimentary canal throughout." A combination of *iridin*, *podophyllin*, and *xanthoxylin*, or *corydalin*, is a most powerful and certain remedy for syphilis, either primary or secondary, and will be found very useful in scrofula. See Journal of Materia Medica, March, 1859.

PREPARATIONS.

Fluid Extract,	Dose, 20 to 60 drops.
Solid "	" 1 to 4 grains
Iridin,	" $\frac{1}{4}$ to 5 "
Pills of Iridin, $\frac{1}{4}$ and 1 grain,	" 1 to 6.

Juglans Cinerea.

(Butternut.)

Butternut is one of the mildest and most efficient laxatives in the materia medica. Stillé says it is peculiarly applicable as an aperient in habitual costiveness, inasmuch as it does not leave the bowels in a confined state. Wood says it is highly esteemed in dysentery. A strong decoction has been much used, as a domestic remedy, in intermittents and remittents, and in other diseases attended with congestion of the abdominal viscera. It is especially adapted to cases of habitual constipation, dysentery and bilious constitutions.

It operates without pain, irritation or subsequent debility of the alimentary canal, and has somewhat of the cathartic character of *rhubarb*, but without inducing constipation after its action.

PREPARATIONS.

Fluid Extract,	Dose, 1 to 2 drams.
Solid "	" 5 to 20 grains.
Juglandin,	" 1 to 5 "

Juniperus Communis.

(*Juniper Berries.*)

Stomachic, carminative, and diuretic. The extract is found to stimulate the appetite and digestion. The oil is one of the most powerful diuretics in the materia medica, and, if long continued, produces irritation of the urinary organs, strangury, &c.

The berries act as a healthful stimulant in chronic affections of the bladder, and, particularly, when the tone of this organ is impaired, inducing a retention of urine. They are employed with advantage in gonorrhea, gleet, leucorrhea, and scorbutic diseases. In cases where colds and inactivity have weakened the action of the kidneys and the skin, juniper berries are especially recommended by Riether, to prevent cutaneous eruptions and abdominal derangements. Their diuretic and healing qualities prove beneficial in difficulty of voiding small calculi, and in purulent secretions caused by their presence.

Juniper is praised by Riether in scarlatinous dropsy, and very favorably spoken of by Swieten in ascites and anasarca. Reported to be useful in scurvy, and by many, employed as a "purifier of the blood."

Contra-indications.—Inflammatory conditions of the system. Irritated states of the kidneys and urinary apparatus. Congestion and active diseases of the pelvic viscera.

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 2 drams.
Solid "	" $\frac{1}{4}$ to 1 "

Juniperus Sabina.

(*Savin.*)

Emmenagogue, diuretic, diaphoretic, anthelmintic and abortive. Sometimes used for worms, with *pink* and *senna*. Savin is particularly called for in cases for which uterine stimulants are appropriate, but as it is perhaps the most powerful agent of the class, it must be circumspectly used. Nearly all writers of enlarged experience concur in attributing to the medicine very decided emmenagogue powers. According to CULLEN, savin shows a more powerful determination to the uterus than any other plant he had employed. The cases of amenorrhea to which it seems most appropriate are ascribed by VOGT, as persons of a torpid and relaxed constitution, and disposed to mucous accumulations and blennorrhœal discharges; in other words, where there is general atony of the system in which the uterus participates, and of which the capital sign is leucorrhea, occurring exclusively or in an aggravated degree about the catamenial period. Under these circum-

stances, PEREIRA declares that savin is the most certain and powerful emmenagogue of the whole materia medica. KOPP recommended savin as a very effectual remedy for dysmenorrhea. He usually prescribed it in conjunction with *borax*, and when there was a great want of tone in the system, added *bark*, *iron* and other tonic medicines. He states also that it acts as an excitant of the venereal propensity, and relieves menorrhagia depending upon chronic passive congestion continuing after delivery. M. ARAN says, strange as it may appear, this powerful emmenagogue has the property of suspending uterine hemorrhages. Savin has also been used successfully for the relief of atonic gout and rheumatism of long standing, and occurring in persons of a cold phlegmatic temperament. Friction of the affected joints with oil of savin, or with an infusion of the tops of the plant, or with savin ointment, or fluid extract, may be employed.

Dr. Chapman strongly recommended it in chronic rheumatism; and it is employed in Germany, both internally and externally, in chronic gout. *In over-doses it is capable of producing dangerous gastro-intestinal inflammation, and should therefore be used with caution. In no case should it be employed when much general or local excitement exists. In pregnancy it should always be given with much caution; though it has recently been recommended as an effective remedy in certain forms of menorrhagia, and is asserted to prove occasionally useful in preventing threatened abortion.*

PREPARATIONS.

Fluid Extract.....	Dose, 10 to 30 drops.
Solid ".....	" 1 to 5 grains.
Pills, 1 grain,.....	" 1 to 5.

Krameria Triandra.

(Rhatany.)

Powerful astringent, combined with tonic properties. Employed internally with advantage in menorrhagia, hematemesis, passive hemorrhages, chronic diarrhea, leucorrhea, chronic mucous discharges, colliquative perspiration, and incontinence of urine. It may be employed with success as a styptic in epistaxis, hemorrhage from the cavity of an extracted tooth, or the surface of a wound, and as a local application to prolapsus ani, fissure of the anus and leucorrhea. As an application to spongy and bleeding gums, the following recipe will be found unsurpassed: Take of *prepared chalk* and powdered *cinchona* equal parts, combine them with equal parts of the fluid extract of *rhatany* and tincture of *myrrh* in quantity sufficient to form a paste. Use daily with a brush. Its styptic influence has arrested the flow of blood in he-

moptysis, hematuria, dysentery, uterine flooding, &c. In softening of the tissues of the heart, in the dilations of the ventricles of that viscus, this agent is said to be employed with confidence. Wherever it is desired to effect the contraction of the tissues of an organ, to arouse or increase the tone, the vigor of the tissues, to combat atony or relaxation of any surface or organic apparatus, the use of rhatany can be resorted to with confidence. As an application to burns, ulcers, and blisters on the skin, this agent effects a decrease of pain with a marvelous rapidity. See Journal of Materia Medica, July, 1866.

Incompatibles.—Mineral acids, lime-water, solutions of the salts of iron, of the acetate of lead and iodine; solutions containing gelatin.

Contra-indications.—Inflammatory states of the alimentary tube. Obstinate constipation.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram.
Solid, ".....	" 5 to 20 grains.
Pills 2 grain.....	" 1 to 5.

Lactuca Sativa.

(*Lettuce.*)

Calmative, hypnotic, and diaphoretic. It may be given as a substitute for opium in checking diarrheas, allaying cough, and diminishing pain in rheumatism. It is to be preferred to opium in many cases on account of its freedom from any unpleasant after-effects, as constipation, excitement of the brain, &c. Dr. Duncan speaks in favor of its influence in phthisis, as effective in allaying cough. Dr. Waring relates an obstinate case of spermatorrhea, which was cured in fourteen days by this agent. Two grains, gradually increased to eight, were administered daily. It has also been employed, with good results, in gout and insanity.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 2 drams.
Solid ".....	" 2 to 5 grains.
Pills, 2 grains.....	" 1 to 3.

Lappa Minor. (Arctium Lappa.)

(*Burdock.*)

Burdock is considered aperient, diaphoretic, and sudorific, without irritating properties. It has been recommended in gouty, scorbutic, venereal, rheumatic, scrofulous, leprous, and nephritic

affections. Sir Robert Walpole praised it as a gout medicine, and others have considered it an excellent substitute for *sarsaparilla*.

The utility of burdock is especially established in the treatment of diseases of the skin, though in some sections it is a popular remedy for ague and general debility.

PREPARATIONS.

Fluid Extract.....	Dose, 1 dram.
Solid "	" 5 to 20 grains.
Pills 2 grains.....	" 1 to 6 "

Laurus Sassafras.

(Sassafras.)

A warm stimulant, alterative, diaphoretic and diuretic. *Sassafras* is employed as a sudorific and alterative in rheumatic, cutaneous, and venereal diseases, in syphilitic and strumous affections. It is rarely used alone, but in combination with *sarsaparilla* or *guaiacum*.

Contra-indications.—Sthenic inflammatory and febrile conditions of the system.

PREPARATION.

Fluid Extract.....	1 to 2 drams.
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Leontice Thalioides. (Caulophyllum Thal.)

(Blue Cohosh.)

Blue cohosh is possessed of emmenagogue, parturient, and anti-spasmodic properties. While it is a valuable agent in all chronic uterine diseases appearing to exert an especial influence on the uterus, it has also been successfully employed in rheumatism, dropsy, colic, cramps, hiccough, epilepsy, hysteria, &c. The extract of blue cohosh is preferable to ergot for expediting delivery, in all those cases where the delay is owing to debility, or want of uterine nervous energy, or is the result of fatigue. Used as a wash for the apthous sore mouth and throat, combined with equal parts of *hydrastis canadensis*.

Caulophyllin, the active principle of the blue cohosh, exerts a direct influence on the uterus, acting according to the periods in which it is employed, as an alterative, uterine tonic, and parturient. A combination of equal parts of *caulophyllin*, *cimicifugin*, and *carbonate of ammonia*, will be found especially valuable in the more common unhealthy conditions of the uterus and its appendages, and in epilepsy, hysteria, rheumatism, and dropsy, in which diseases it has been recommended as an anti-spasmodic. See Journal of Materia Medica, Sept., 1861.

Incompatibles.—Salts of Iron; acetate of lead; gelatin; mineral acids, &c.

PREPARATIONS.

Fluid Extract,.....	Dose, 15 to 40 drops.
Solid "	" 1 to 5 grains.
Caulophyllin.	" $\frac{1}{2}$ to 4 "
Pills, 2 grains,.....	" 1 to 3.

Leonurus Cardiaca.

(*Motherwort*.)

Emmenagogue, nervine, anti-spasmodic, and laxative. It is even pronounced by some as superior to any other remedy, in suppressed lochia, and amenorrhœa from colds. The extract made into a warm infusion should be used.

Motherwort is recommended in nervous complaints, in irritable habits, delirium tremens, in all chronic diseases attended with restlessness, wakefulness, disturbed sleep, spinal irritation, neuralgic pains, and liver affections.

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 2 drams.
Solid "	" 3 to 6 grains.
Pills, 2 grains.....	" 1 to 2.

Leptandra Virginica.

(*Culver's Root*.)

This agent is peculiarly applicable to bilious and typhoid fevers, causing discharges of a black, tarry, and morbid character, without debilitating the tone of the bowels, or of the general system. It has been successfully employed in leprosy and cachectic diseases, and its effects in these instances may probably be owing to its influence on the biliary apparatus. As a laxative and tonic, in small doses, it is valuable in dyspepsia, especially when connected with an inactive condition of the liver, and torpid and debilitated bowels; likewise in all functional diseases of the liver, as above remarked.

Leptandrin, the resinous principle of leptandra, is a powerful cholagogue, with but slight laxative influence; except given in large doses, its cathartic powers are very feeble. It is one of the most efficacious and important among those peculiar to eclectic practice, being the only known medicine that efficiently stimulates and corrects the hepatic secretions, and functional derangements of the liver, without debilitating the system by copious alvine evacuations. It may be safely and efficaciously employed in

the treatment of diarrhea, cholera infantum, some forms of dyspepsia, typhoid fever, and all diseases connected with biliary derangements.

"This is not, strictly speaking, a cathartic. It is aperient, alterative, and tonic. Its effects on the liver are peculiar. While it acts freely upon the liver, instead of purging, it seems only to change the discharges from the light and watery or slimy condition, to a darker and apparently bilious state, rendering them more and more consistent until they become perfectly natural, without having been arrested at any time entirely, or at any time aggravated. It at the same time seems to act as a tonic, restoring the tone of the stomach and increasing the strength and activity of digestion. It is a most valuable remedy in dyspepsia.

When in combination with *podophyllin* it forms an exceedingly valuable and effective alterative and cholagogue. There is not a better cholagogue preparation known in medicine than the combination of *podophyllin* and *leptandrin*." For other remarks on this last combination, see *Journal of Materia Medica*, March, 1858.

PREPARATIONS.

Fluid Extract,.....	Dose, $\frac{1}{2}$ to 1 dram.
Solid "	" 2 to 4 grains.
Leptandrin,.....	" $\frac{1}{2}$ to 1 grain in acute cases.
"	" 1 to 2 " in chronic "
Pills of Leptandrin, one grain,.....	" 1 to 2.

Liatris Spicata.

(*Button Snake Root.*)

Tonic, diaphoretic, alterative and diuretic, with emmenagogue and stimulant properties. *Liatris*, in the form of decoction or extract, is very efficacious in gonorrhea, gleet and nephritic diseases; useful in gravel and dropsy. It forms an excellent gargle in sore throat. Reputed beneficial in scrofula, dysmenorrhea, amenorrhea, after-pains, etc. Said to be beneficial in Bright's disease, in connection with *lycopus virginicus* and *alutris farinosa*.

PREPARATION.

Fluid Extract.....	Dose, 1 to 2 drams.
Liatrin	" 4 to 8 grains,

Ligusticum Levisticum.

(*Lovage.*)

Stimulant aromatic, and has been employed as a carminative and diaphoretic. The root, stem, leaves, and seeds have all been employed in medicine. The root and seeds are the most es-

teemed. The extract of the root acts upon the urinary organs, increasing the flow of urine, and is sometimes efficacious in bringing away gravel. The medical qualities of lovage have made the drug available in removing visceral obstructions, dispelling flatulency, increasing perspiration, and in the treatment of jaundice. It is often added to purgative preparations, on account of its aromatic carminative properties.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{4}$ to 1 dram.

Liriodendron Tulipifera.

(White-Wood.)

Liriodendron is an aromatic, stimulant tonic with diaphoretic properties. It has been used as a substitute for Peruvian bark, proved beneficial in intermittents, chronic rheumatism, dyspepsia and other complaints, complicated with general atony of the system. Combined with a small quantity of *laudanum*, it is pronounced effectual in hysteria, and said to be advantageously employed to abate hectic fevers, night-sweats, colliquative diarrhea of phthisis. See Journal of Materia Medica, vol. 2.

PREPARATION.

Fluid Extract.....Dose $\frac{1}{4}$ to 2 dram.

Lobelia Inflata.

(Lobelia.)

Lobelia is emetic, nauseant, expectorant, relaxant, sedative, anti-spasmodic and diaphoretic, also narcotic. When taken in a sufficient dose to act as an emetic, there appears to be a greater diminution of the vital powers than from the action of ipecacuanha. It probably takes a shorter time to produce *emesis*, than the last named article, and, as far as my observation has extended, operates nearly as mildly—reaction occurs as readily—the pulse assumes fresh vigor—a copious warm perspiration takes place, and the patient feels a glow over the surface of the body. Prof. Dunglison says it is an *acro-narcotic*. “Narcotics are agents which first excite and then diminish nervous action, and, in sufficient doses, stupefy.”

In regard to the caution which should be observed in administering lobelia, Dr. Waring remarks as follows: “It is always advisable to commence with small doses, and increase them as the patient is able to bear the medicine, discontinuing its use if it cause nausea, intermittent pulse, or great depression.”

It is said to have been successfully employed in incipient phthi-

sis, hemoptysis, and other hemorrhages; it allays irritation, diminishes the frequency of the pulse, and lessens cough. It acts somewhat like digitalis in abating the frequency of the pulse, but is devoid of the dangerous effects resulting from the use of that agent. Dr. CUTLER, of Massachusetts, used it successfully in asthma. Dr. BIGELOW quotes Dr. RANDALL as stating that it is as successful in asthma as any article that he has tried, and that he has found it to remove the paroxysms in a short time, and restore the patient to quietude and rest.

Dr. ELLIOTSON, of England, states that it is by far the best medicine in spasmodic breathing he was acquainted with. "With many," says Dr. E., "it acts as a charm in asthma, and in ten or twenty minutes they will be perfectly relieved, so that all the other remedies, used in this disease, are nothing when compared with it." A very similar opinion is entertained by Mr. BOWER, who professes to have had much experience in its use. According to his statement, many are relieved of disease of the heart in a short time by the use of this agent. It is in the highest degree beneficial, even in organic diseases of the lung itself. It is said that nothing approaches the direct and specific action of lobelia upon the motor nerves of respiration. Said to be more speedy and more certain in its operation than digitalis, and more direct than ipecacuanha. SCHLESIER thinks it can not be sufficiently commended in spasmodic asthma. ANDREWS, MORELLI, and TODD hold to nearly the same opinion. In spasmodic or stridulous laryngitis, lobelia perfectly fulfills the conditions of cure.

A writer in the Stethoscope says: "Although I have seen it given in enormous doses, and in many instances injudiciously, I have never seen it produce narcotism, and it certainly does not irritate the stomach as much as ipecacuanha. I have seen persons who had taken large doses, and it failed to produce emesis—there certainly was considerable prostration—and I have never seen any evil effects produced by it which might not have been produced by any other emetic of the same class, in proportionate doses, and in the same circumstances. I was induced to try it, from the recommendation of authors, in a case of spasmodic asthma. I found it more effectual in relaxing the spasm, and more certain in its effects than anything else. It would frequently prove beneficial given in dram doses, so as to nauseate and not produce emesis. If desirable to produce emesis, from half to one ounce of the tincture may be given. Prof. Wood says he has derived more advantage from it in that disease than from any other single remedy. The same author admits it may do good in chronic bronchitis, attended with dyspnoea; and I can add my testimony to his, and say that I have derived considerable benefit from its use in the same disease, especially in children. I think it ought to supersede the

use of tobacco enemata for the purpose of relaxing the system, for the reduction of luxations and strangulated hernia. It is certainly not as dangerous, and is equally as efficacious. In laryngismus stridulus, as well as bronchitis, tracheitis, pertussis, associated or not with other remedies, good may be expected from its use; so also in pneumonia, when tar, antimony, or ipecacuanha are contra-indicated from irritation and inflammation of the mucous coat of the stomach, small doses may be given every hour or two to induce nausea.

Lobelia Compound.

Lobelia, bloodroot and skunk cabbage enter into the composition of this preparation. It possesses antispasmodic, narcotic, stimulant and expectorant properties. Is favorably spoken of in chronic catarrh, and bronchitis, hysteria, and pulmonary complaints, and to subdue asthmatic spasms. There are few cases in which either ingredient is indicated, that this compound does not claim the preference.

PREPARATIONS.

Fluid Extract,	Dose, expectorant,	10 to 60 drops.
" " " " " "	" emetic,	$\frac{1}{4}$ to 1 dram.
" " (comp.) " " " "	" " " " " "	$\frac{1}{4}$ to 1 "
Lobelin,	" " " " " "	$\frac{1}{4}$ to 1½ grains.

Lycopus Virginicus.

(Bugleweed.)

Sedative, tonic, astringent and narcotic. Used successfully in incipient phthisis, hemoptysis and other hemorrhages. It allays irritation, diminishes the frequency of the pulse, and lessens cough. It acts somewhat like digitalis in abating the velocity of the pulse, and is devoid of the dangerous effects resulting from the use of that drug. Said to have cured diabetes when all other means were useless. Beneficial in chronic diarrhea, and dysentery, intermittents, &c. It has been known to arrest epistaxis when all other remedies failed. The late Prof. Rafinesque remarked: "I consider the bugleweed a very good substitute for all narcotics, prussic acid and even bleeding, since it produces the same state of the pulse and arterial system without inducing any debility, or acting on the heart and brain in any injurious manner." May be used in humoral asthma, and chronic diarrhea.

PREPARATION.

Fluid Extract,	Dose, 1 to 2 drams.
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Marrubium Vulgare.*(Horehound)*

Stimulant, tonic, expectorant, and diuretic. It is used in the form of syrup, in coughs, colds, chronic catarrh, asthma, and all pulmonary affections. The fluid extract made into a warm infusion will produce diaphoresis and, sometimes, diuresis; has been used with benefit in jaundice, hoarseness, amenorrhea, and hysteria. The extract is an excellent tonic in some forms of dyspepsia, acts as a vermifuge, and will be found efficacious in checking mercurial ptyalism. In large doses it purges. It is applicable to all cases of gastric atony, and appears to have a special relation to the respiratory mucous membranes. Much benefit, says Dr. A. T. Thompson, has been produced by it in catarrh, in which there is much cough, with copious excretions of mucus, nocturnal sweats, and great prostration.

The warm infusion is an excellent palliative in phthisis and peripneumonia.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram.
Solid ".....	" 5 to 10 grains.
Pills, 2 grains.....	" 2 to 5.

Mentha Piperita.*(Peppermint)*

Aromatic stimulant, carminative and stomachic. It is the most pleasant of all the mints; employed in medicine for several purposes, principally to expel flatus, to cover the unpleasant taste of other medicines, and to relieve nausea, and griping pains of the alimentary canal.

The oil of peppermint has been recommended in puerperal fevers, by M. Dove. He employed, with satisfactory results, thirty to forty minims, in divided doses, in the twenty-four hours. A stimulating aperient preceded its use.

PREPARATION.

Fluid Extract.....	Dose, 1 to 2 drams.
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Mentha Viridis*(Spearmint)*

Aromatic, carminative, anti-spasmodic and stimulant. It is employed in flatulence, and to relieve the pain of colic, and considered a specific in allaying nausea and vomiting. The

fluid extract is beneficial in high color or scalding urine, difficult micturition, &c. The tincture has been found serviceable in gonorrhea, strangury, gravel, and as a local application to painful hemorrhoids.

Its principal employment is for its febrifuge and diuretic virtues. Pronounced superior to *peppermint* as a febrifuge. The fluid extract made into a warm infusion may be used freely.

Incompatibles.—Sulphate of iron, nitrate of silver, acetate of lead, &c.

PREPARATION.

Fluid Extract.....Dose, 1 to 3 drams.

Myrica Cerifera.

(*Bayberry. Wax-Myrtle.*)

Mild astringent and stimulant. In large doses it is liable to produce emesis. It may also possess expectorant properties, connected with its acridness. This agent is considerably employed by a class of physicians in the management of strumous complaints, jaundice, diarrhea, dysentery, and other diseases where an astringent stimulant is needed. Dr. Fahnestock speaks highly of its efficiency in dysentery. The extract proves very beneficial as a gargle and injection, in chronic inflammation of the throat, leucorrhea, &c.

PREPARATIONS.

Fluid Extract.....Dose, 1 to 2 drams.
Myricin, " 2 to 10 grains.

Myrica Gale.

(*Sweet Gale.*)

Acrid, stimulant, and astringent. In large doses, it proves an emetic, over-burdening the stomach with stimulus. The extract has been administered with benefit in diarrhoea, dysentery, and diseases where astringent stimulants are indicated. It has also been recommended as a vermifuge, both as an internal and external application.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.

Nicotiana Tabacum.

(*Tobacco.*)

Medicinally, a sedative, emetic, diuretic, expectorant, discutient, anti-spasmodic, errhine and sialagogue. Moderately taken it quiets restlessness, calms mental and corporal inquietude, and produces

a state of general languor or repose. Large quantities give rise to alarming symptoms.

PREPARATION.

Solid Extract, Dose

Nepeta Cataria.

(*Catnep.*)

Diaphoretic and carminative, anti-spasmodic, emmenagogue and diuretic. In warm infusion the extract is used in febrile diseases, as a diaphoretic, and to allay convulsive action and produce sleep; it is also given as a carminative and anti-spasmodic in the flatulent colic of children. As an emmenagogue or uterine tonic, it has proved decidedly beneficial in amenorrhea and dysmenorrhea, and has likewise been successfully employed in asthma, hysteria and flatulent colic of infants.

The fluid extract of *catnep* and *saffron* in the form of a warm infusion is a very popular remedy in colds and exanthematous diseases, to which the young are subject. The fluid extract of *catnep*, *valerian*, *scullcap*, forms an excellent agent in nervous headache, restlessness and nervous irritability. This agent sometimes proves efficacious in restoring the menstrual flood after other remedies have failed.

PREPARATION.

Fluid Extract. Dose, 2 to 4 drams.

Nymphæa Odorata.

(*Lily, White.*)

Astringent, demulcent, anodyne, alterative, anti-scorfulous.

It is a popular remedy in all bowel complaints, and employed as an astringent in gleet, fluor albus, etc. Very beneficial in scrofula, and, combined with *wild cherry*, in bronchial affections. A case of uterine cancer, which had obstinately resisted all medical treatment, is mentioned by Dr. King, as having been permanently cured by the free use of the root.

Matson recommends it as a gargle in sore throat. There is scarcely any vegetable, says Bigelow, which affords more decided evidence of astringency than the root of this plant; formerly celebrated as an antaphrodisiac, and a remedy in morbid discharges. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract. Dose, $\frac{1}{2}$ to 1 dram.

Opium.

"Topically it is a direct stimulant and indirect sedative of the nervous, muscular, and vascular systems. A moderate dose,

taken while in health, augments the volume and velocity of the pulse, increases the heat of the surface, gives energy to the muscles, renders the mind more acute, and produces a general excitement of the whole system."

Dr. Waring remarks as follows on the use of opium: "Some persons are peculiarly susceptible to the use of opium, and are unable to take even the smallest dose without its occasioning delirium; a high state of nervous irritability, vomiting, diarrhoea, &c. Where this idiosyncrasy exists, opium should not be given, unless more than ordinary circumstances demand it. When, however, its exhibition is necessary in these subjects, it is sometimes tolerated, if given in the form of an enema; or, if given by mouth, a few grains of capsicum will be found to allay the vomiting, and the addition of camphor, or tartar emetic, will in a great measure obviate the irritability. As a general rule, however, opium should not be given in any form in these cases.

Infants and young children bear the exhibition of opium badly.

Numerous are the instances on record in which two or three drops of laudanum have produced fatal results in young children; and opium in every form should be avoided, unless it is imperatively called for, and should never be given without the greatest caution. It should be laid down as a rule, that when it is necessary to prescribe opiates for children, those preparations whose strength is regulated by a certain standard should be preferred to those whose strength is variable and uncertain. Thus, tinctura opii, tinctura camphoræ cum opio, and Dover's Powder, are preferable to syrup of *poppies*, the strength of which is very variable.

Those persons who are unaccustomed to opium require a much smaller quantity of the drug, to produce a certain effect, than those who are habituated to its use.

Combination with other drugs greatly modifies the action of opium. Ipecacuanha increases its action on the skin; mercurials obviate its constipating influence; and tartar emetic lessens the action which it would otherwise excite in the nervous system.

When a large dose of opium has been administered, and the patient is still suffering intense pain, how long should we wait before it would be considered safe to repeat it? This question, put by Dr. Griffin, is answered by him, that half an hour is the limit within which crude opium will be found to manifest its effects; and that the dose may be safely repeated, if the pain or spasm be not relieved, however often it may be given. The liquid preparations of opium act rather sooner than the solid drug.

When opium is given for the relief of pain, particularly of a periodical character, a third part of the dose which was required to relieve the paroxysm is required to prevent its recurrence. In fact, a moderate dose given in the interval will sometimes prevent

the accession of the fit, when no quantity, however great, can control it, after it has once set in.

When opium or opiates have been given for any length of time, or in large doses, a period of exhaustion and sinking almost invariably ensues from twelve to twenty-four hours after the drug has been discontinued. A great amount of exhaustion and sinking has been observed to follow the omission of even a very reduced dose, particularly in children. A little nourishment, or some slight stimulant, is here necessary.

An over-dose of opium will produce effects very similar to those of an under-dose. Where a restless night has resulted from an over-dose having been given, sound sleep may occur next night without any opium whatever. Again, if the doses of opium given with advantage during the existence of inflammation be continued when this has subsided, stupor, or troubled sleep, according to the degree of surplus opium given, will result.

In order to procure sleep, opium should be given an hour or two before the usual hour of retiring to rest, in order to allow the stage of excitement to pass off previous to that time.

When from irritability of the stomach, or some other cause, opium can not be administered by mouth, it may often be advantageously administered in the form of enema; a larger dose, a third or half larger, is required when it is exhibited in the latter mode. It may also prove of the highest service when applied externally in allaying pain, irritation, and inordinate action, not only of the skin, but of the subjacent tissues.

As a diaphoretic, opium is best combined with ipecacuanha.

Opium is either contra-indicated, or should be given with caution, in the following states: 1. In cerebral affections occurring in persons of a plethoric habit, and where congestion of the vessels of the brain is suspected. 2. In acute sthenic inflammation in plethoric subjects, previous to the employment of depletion. 3. In pulmonary affections, when the cough is dry and hard, and the expectoration is difficult and scanty. 4. In affections of mucous membranes of the air-passages, attended with copious secretion. In such conditions the narcotizing influence of opium, by diminishing the respiratory function, has often proved fatal. 5. In morbid states of the body, where venous congestion is evident. 6. Whilst the urine is scanty and high-colored. Alkalies should, in such a case, be generally administered first; but if the symptoms be urgent, and opium is imperatively called for, it should be given in combination with alkalies. 7. During pregnancy. Dr. Denman states that he is persuaded that the frequent use of opiates by pregnant women is prejudicial to the foetus. 8. In fevers and other morbid states, accompanied by contraction of the pupils.

PREPARATIONS.

Aqueous Extract of Opium,	{ for infants. Dose, 1 to 5 drops.	
	{ for adults. " 10 to 60 "	
Fluid Opium Deodorized, { for infants.	" 1 to 5 drops.	
{ for adults.	" 10 to 60 "	
Pills of Opium, 1 grain.	" 1 to 4.	
" " and Acetate of Lead, 2 grains.	" 1 to 3.	
" " " Camphor, 3 grains,	" 1 to 2.	
" " " and Tannin, 3½ grains,	" 1 to 2.	

Opium, Aqueous.

(Opium, Aqueous.)

The aqueous solution possesses all the anodyne, sedative, and antispasmodic effects of opium, and of the various preparations of this well known and useful medicine, and is superior to any similar one before the public. It is the result of many years observation and study of one of the most eminent physicians in the country, and was used in a long and extensive practice.

It is a very pleasant anodyne and anti-spasmodic, much used to allay cough in chronic catarrh, asthma, consumption, &c.; to relieve nausea and slight pains in the stomach and bowels; to check diarrhea; and in infantile cases to procure sleep.

It may be used when the crude drug usually would be. It is of the strength of laudanum, and may be given in similar doses.

Many physicians have long used an empirical aqueous solution, and differing only from the officinal solution, in mode of preparation.

Repose is usually induced by the minimum dose, but in obstinate irritation, the dose can be repeated several times with safety.

The advantages claimed for this preparation are, that constipation and unpleasant consequences following the administration of opium in its ordinary forms are wholly or nearly avoided.

This preparation may be administered as an anodyne or to induce rest, when opium itself can not be prescribed with safety.

Incompatibles.—Ammonia, carbonates of potassa and soda, nitrate of silver, acetate of lead, salts of copper, iron and zinc, astrigent infusions, &c.

PREPARATIONS.

Fluid Extract, (for infants),	Dose, 1 to 5 drops.
" (for adults),	" 10 to 60 "

Papaver Somniferum.

(Poppy.)

Poppy capsules, though similar in their effects to *opium*, are

much weaker in their action. They are used in decoction, emulsion, syrup or extract to calm irritation, relieve pain and promote rest. The decoction forms a common fomentation, which is applied to burns, inflamed or excoriated parts. Over ordinary opiates the syrup has the positive advantage of a less disagreeable taste.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{4}$ to 1 dram.
Solid ".....	" 3 to 10 grains.
Pills, 2 grains.....	" 2 to 5.

Phytolacca Decandra.

(*Garget, or Poke.*)

Emetic, cathartic, alterative, antiherpetic, and somewhat narcotic. In doses of from one to five grains it acts as an alterative.

The extract is an excellent remedy for the removal of those severe pains attending mercurio-syphilitic affections, in which it is more beneficial than opium. It is said to have been successfully employed in chronic rheumatism and in hemorrhoids.

Its emetic action is characterized by slowness, not producing any special effect till some time after it has been taken, and then continuing to act for a considerable time upon the stomach and bowels. This action is not attended with much pain or spasm, but narcotic effects have been observed, such as drowsiness, vertigo, and dimness of vision. In small doses it partakes of alterative powers, exciting the whole glandular system, and producing highly beneficial results in syphilitic, scrofulous, rheumatic, and cutaneous diseases.

The root roasted in hot ashes until soft, and then mashed and applied as a poultice, is unrivaled in felons and humors of various kinds. It discusses them rapidly, or if too far advanced, hastens their suppuration.

It is said to have been used with good effect in paralysis of the intestines. The ointment has been employed to a considerable extent in the treatment of felons, sanious ulcers, cutaneous eruptions, itch, hemorrhoids, and cancer. In this last disease, Dr. Bone combined it with gunpowder. It is asserted that poke is a sure cure for syphilis in all its stages, without the use of mercury.

The *phytolaccin* of Tilden's, which seems to be the chief active principle, is now used successfully as an alterative tonic in doses of from one-fourth to one grain.

PREPARATIONS.

Fluid Extract,	Dose, 10 to 80 drops.
Solid ".....	" 1 to 4 grains.
Phytolaccin,	" $\frac{1}{4}$ to 1 "

Pills of Phytolacca, 1 grain.....	Dose, 1 to 4.
“ Phytolaccin, $\frac{1}{4}$ “	“ 1 to 2.

Pinus Canadensis.

(*Hemlock.*)

This is a common forest tree, found in great abundance in the British Provinces, in North America, and in most of the New England States, and also in the mountainous regions of the Middle States. The bark contains a large amount of tannin, and is extensively used in the manufacture of leather. The whole plant contains an oleo-resinous substance, which is manifest by its fragrant exhalations. The extract, furnished from the bark, is a valuable remedy in the treatment of chronic diarrhea, in the last stages of dysentery, and cholera infantum. The valuable astringent properties have suggested its employment in hemorrhoids, menorrhagia, &c., as well as in many other cases, in which matico, tannin, and rhatany have been ably defended.

PREPARATION.

Fluid Extract.....Dose, 1 to 2 drams.

Artanthe Elongata.

(PIPER ANGUSTIFOLIUM.)

(*Matico.*)

Aromatic, tonic, stimulant and styptic. Its therapeutical agency is highly recommended in hemoptysis, hematemesis, dysentery and hematuria, in doses of one dram of the powdered leaves, or one fluid dram of the fluid extract four times a day. Hemorrhage from the nose or uterus has been arrested by the internal administration of matico, after other remedies had completely failed to control the bleeding. As an internal remedy it has also been successfully employed in diseases of the mucous membrane, as gonorrhea, leucorrhea, menorrhagia, catarrh of the bladder, hemorrhoids and epistaxis.

The leaves form a superior medicinal styptic for arresting hemorrhage from wounds, leech-bites, &c. The downy part of the leaf is said to be the most active part. Also applied to ulcers. Its essential oil is recommended in the treatment of gonorrhea. See Journal of Materia Medica, vol. 5.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{4}$ to 2 drams.

Piper Cubebæ.

(*Cubebæ.*)

Cubebæ is a well tried remedy in the treatment of gonorrhea.

It is aromatic, pungent, stimulant and purgative, and acts as a specific in arresting gonorrheal discharges. It has also been given in leucorrhea, cystitis, abscess of the prostate gland, piles, and chronic bronchial inflammation. The use of cubebs is *contra-indicated* during a high inflammatory condition, and is advised to be used in gonorrhea only when the inflammation is confined to the mucous membrane of the urethra. Dr. Dieters extols the use of cubebs in involuntary micturition, or incontinence of urine, given in tolerably large doses twice a day, for from three to eight weeks. It is highly valued by many practitioners in the blennorrhoea of females, as well as in leucorrhea. It has the power of arresting excessive discharges from the urethra.

PREPARATIONS.

Fluid Extract of Cubebs,	Dose, $\frac{1}{2}$ to 1 $\frac{1}{2}$ drams.
“ “ “ Etheral,	“ 1 to 2 “
Solid “	“ 2 to 20 grains.
Pills of Extract Cubebs, 2 grains,	“ 1 to 6.
“ “ and Copaiba, 8 grs.,	“ 2 to 4.
“ “ Copaiba, and Cit. Iron, 8 gr.	“ 1 to 4.
“ “ and Alum, 8 grains,	“ 2 to 4.
“ “ and Ext. Rhatany and Iron, .	“ 1 to 8.

Piper Nigrum.

(Black Pepper.)

Black Pepper is a warm carminative stimulant. It appears, in common with cubebs, to exercise a specific influence on the mucous membranes of the rectum and genito-urinary organs. In large doses, it produces inflammation of the stomach, and acts as an irritant poison. Its chief medicinal application is to excite the languid stomach and correct flatulence. In intermittent fever, when the stomach is not duly susceptible to the action of quinia, as sometimes in drunkards, pepper may be found a useful adjuvant to the more powerful febrifuge.

Dyspeptic persons have been greatly benefited, and sometimes cured by the use of pepper alone. Cases of gonorrhea are mentioned, in which this remedy proved effectual.

Dr. Brodie advises the persistent use of this drug in chronic cases of hemorrhoids occurring in old persons, or proceeding from debility. An aperient should occasionally be given.

Contra-indications.—Inflammation of the rectum and intestines.

Incompatibles.—Vegetable astringents.

PREPARATIONS.

Fluid Extract,	Dose, 10 to 40 drops.
Pills of Piperin, $\frac{1}{4}$ grain,	“ 2 to 4
Piperin	“ 1 to 6 grains.

Podophyllum Peltatum.

(Mandrake.)

Mandrake is cathartic, emetic, alterative, anthelmintic, hydragogue and sialagogue.

The root of podophyllum is a sure and active cathartic, in which character it deserves a high rank among our indigenous productions. We have no native plant that answers better the common purpose of *jalap*, *aloes* and *rhubarb*, and which is more safe and mild in its operation. It acts principally as a *cathartic*; *drastic*, also as an *emetic*, if taken in quantity; *laxative*, if the doses administered are moderate. It promotes glandular action, exerting also a powerful influence on the condition of the cutaneous tissue, and regulates the circulatory system.

As a deobstruent, it is one of the most valuable in our materia medica, acting through and upon all the tissues of the system, and its action continues for a long time. In bilious and typhoid febrile diseases, it is very valuable as a cathartic, or emetico-cathartic, often breaking up the disease at once.

A moderate use of the podophyllum is effectual in chronic hepatitis; and, indeed, all cases of hepatic derangement, whether of short or long standing, are overcome by this treatment.

There is not its superior in the whole range of medicines, arousing the liver to a more healthy action, increasing the flow of bile, and keeping up these actions longer than any other agent with which we are acquainted. In alterative doses, it has been found exceedingly valuable in scrofula, syphilitic diseases, rheumatism, &c. In constipation, it acts upon the bowels, without disposing them to subsequent costiveness. It has likewise been found very beneficial in dysmenorrhea, amenorrhea, incontinence of urine, worms, and some affections of the bladder.

It promotes free action of the kidneys, arousing the absorbents, being a regulator of all secretions, so far as any one medicine can be, and exerts a complete influence over the pathologic condition of the blood, preventing its strong determination to any part where congestion or incipient inflammation would be produced—as, for instance, in the brain. In intermittent fevers, in inflammation of the brain, and in dropsical affections, it has been used with marked success, acting as a powerful cholagogue and deobstruent, at the same time restoring and equalizing the circulation. It has been deemed advisable by some physicians, to give in connection with the podophyllum some slight cathartic, as the bitartrate of potassa, if speedy action is desirable.

PODOPHYLLIN, the active principle of *Mandrake*.—This is an alterative and cathartic, and acts in many respects like mercurial preparations. It rouses the liver to vigorous action, stimulates

the kidneys, promotes expectoration, augments the glandular functions, and cleanses the canal of all irritating substances. Its range of application is, perhaps, more extensive than any other cathartic medicine. Very much might be said in regard to its merits and mode of application.

It exerts a favorable influence on the cutaneous functions, producing and maintaining a constant moisture of the skin. It produces ptyalism in some persons, and is said to produce a powerful and lasting impression upon the glandular system and secretory organs, unequaled by any other article.

It is useful in scrofulous diseases, hepatic affections, dysmenorrhea, gonorrhea; also administered beneficially in jaundice, dropsy, dysentery, diarrhea, bilious, remittent, and intermittent fevers, typhoid fever, and all glandular enlargements. When in combination with leptandrin, it forms an exceedingly valuable and effective alterative and cholagogue. There is not a better cholagogue preparation known in medicine than the combination of podophyllin and leptandrin. For further illustration of the properties of podophyllum and leptandra, see Journal of Materia Medica, March, June, July, 1868.

Podophyllum Compound.

The constituents of this compound are *mandrake*, *senna* and *jalap*. It acts as an antibilious purgative; and may be used in cases where the object is to produce prompt and copious evacuation, where an active impression is required to remove from the intestinal tube irritating substances.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram.
" Compound.....	" 1 to 2 "
Solid "	" 3 to 12 grains.
Podophyllin.....	" $\frac{1}{4}$ to $\frac{1}{2}$ and 1 to 3 grs.
Pills of Podophyllin, $\frac{1}{4}$ grain.....	" 2 to 4.
" Ext, Podophyllum, 1 grain.....	" 3 to 8.
" Podophyllum and Blue Mass, 3 grs.....	" 1 to 2.
" " Compound, 1 grain.....	" 1 to 2.

Polygala Senega.

(*Seneka*.)

This plant is an active stimulant, increasing the force of the circulation, especially that of the pulmonary vessels; it has been found very useful in typhoid inflammation of the lungs. Dr. Brandreth, of Liverpool, has derived great service from its employment, in cases of lethargy, in the form of an extract, combined with *carbonate of ammonia*. It has been given in hydropic cases; and as it sometimes promotes plentiful discharges by urine,

stool, and perspiration, it is frequently the means of removing the disease after the ordinary cathartics, diuretics, and hydragogues have failed. Dr. Milne spoke highly of the decoction, joined with bi-tartrate of potash, in dropsy. Dr. Percival administered it in hydrops pectoris. It has been employed in nervous affections and hectic fever, in hydrothorax, from its stimulating effect on the kidneys, and in diseases of the lungs, from its augmenting the absorbent forces. In pneumonia, after bleeding, and in the typhoid stage, it is one of the best remedies for promoting expectoration; at an earlier period, it is too stimulating. Dr. Bru found it eminently useful in the asthma of old people, and in the latter stages of croup; and Dr. Chapman found it efficacious in recent cases of amenorrhœa.

Seneka may be given, as Dr. Chapman judiciously advised, in typhoid pneumonia, in the decline of the ordinary form of the disease, or when it attacks old or feeble persons. It is decidedly, beneficial in subacute and chronic inflammation of the bronchia and in bronchorrhœa. It is considered by some as one of the most active and certain emmenagogues. Some of the German writers attribute to this article a very problematical influence over scrofulous inflammations of the conjunctiva, cornea, &c., including those which involve a rheumatic or gouty element.

Dr. Archer, of Maryland, extravagantly praises seneka, as a remedy for croup, representing it as being capable, unassisted by other remedies, of removing the alarming disease. See Journal of Materia Medica, vol. 6.

Contra-indications.—All active inflammatory conditions, especially of the lungs.

PREPARATION.

Fluid Extract. Dose, 20 to 40 drops.

Polygonum Punctatum.

(*Water Pepper.*)

Water-pepper possesses stimulant, diuretic, emmenagogue and diaphoretic properties; highly recommended in amenorrhœa. Dr. Eberle testifies that he employed it in twenty cases, and was never more successful. Dr. Ogier, of Charleston, S. C., published many cases of catamenial suppression, in which water-pepper proved eminently serviceable.

In combination with *sulphate of iron* and *gum myrrh*, it is said to have cured epilepsy—probably dependent on some uterine derangement. The infusion in cold water, which may be readily prepared from the fluid extract, has been found serviceable in gravel, colds and coughs, and mixed with *wheat bran*, in bowel complaints.

Antiseptic and vesicant virtues are also claimed for it. Simmered in water and vinegar, it has proved useful in gangrenous, or mortified conditions. The extract in the form of infusion or fomentation has been beneficially applied in chronic ulcers and hemorrhoidal tumors, also a wash in chronic erysipelatous inflammations, and as a fomentation in tympanitis and flatulent colic. The infusion in cold water is recommended in pytalism.

PREPARATION.

Fluid Extract.....Dose, 10 to 60 drops.
Solid " " 2 to 3 grains.

Populus Tremuloides.

(Poplar.)

Poplar possesses tonic and febrifuge properties. It may be used with beneficial results in intermittents, remittents, impaired digestion, chronic diarrhea, and in cases where the system has been debilitated.

This agent has proved serviceable as a diuretic, and employed with considerable success in gonorrhea, gleet and many other urinary affections. See Journal of Materia Medica, vol. 2.

PREPARATIONS.

Fluid Extract.....Dose, 1 to 2 drams.
Populin..... " 4 to 8 grains.

Prinos Verticillatus.

• (Black Alder.)

Tonic, alterative, astringent, and as a local application, stimulant. Recommended in intermittent fevers, diarrhea and other diseases, connected with debility, especially mortification and gangrene. It is a popular remedy in gangrenous or flabby and ill-conditioned ulcers, and in chronic cutaneous eruptions, given internally; applied externally in form of wash or poultice.

It has been employed with good effect in jaundice, also obtained considerable reputation in the treatment of dropsy. The medicinal reputation of prinos is so highly valued that it has become an ingredient of several syrups. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram

Prunus Virginiana.

(Wild Cherry.)

Uniting with a tonic power the property of quieting irritation

and diminishing nervous excitability, it is adapted to cases where the digestive powers are impaired with general local irritation existing at the same time.

It is useful in all diseases where it is of importance to impart tonicity, and yet, to avoid any undue excitement of the heart and blood-vessels, as for instance, during the first stage of convalescence from inflammatory attacks, and in many pulmonary diseases. Its uses are indicated in all cases requiring the use of a general tonic particularly in cases of the impairment of the constitution by dyspepsia, indigestion, &c.; in dyspepsia attended with neuralgic symptoms, and general debility following inflammatory fevers; in diseases in which debility of the system is united with general local irritation.

On account of its gently astringent properties united with its sedative action, it has been found highly beneficial in complaints incident to the summer months, in diarrhea, chronic diarrhea, and in preventing the weakness and relaxation of the bowels which produce them.

Wild Cherry Compound.

Wild cherry, horehound, lettuce, veratrum and bloodroot, form this compound. It is admirably well adapted to those debilitated states of the system complicated with nervous irritability and cough. It operates with magical efficacy in the convalescent stages of inflammatory attacks, and pulmonary affections.

PREPARATIONS.

Fluid Extract of Wild Cherry.....	Dose, 2 to 4 drams.
" " Compound.....	" $\frac{1}{2}$ to 2 "
Prunip.....	" 2 to 6 grains.
Wine of Wild Cherry.....	" 1 to 4 drams.
Ferrated Wine of Wild Cherry.....	" 1 to 4 "

Ptelea Trifoliata.

(*Ptelea*.)

Pure, unirritating tonic. Used in intermittent and remittent fevers, and all cases where tonics are indicated. It is recommended in asthma and pulmonary affections, and stated to be tolerated by the stomach, when other tonics are rejected. It gives tone to the appetite, stimulates the stomach to healthy action, and promotes the early re-establishment of digestion.

Professor J. D. Jones claims for this medicine soothing influences when applied to mucous membranes, and states that he has derived great benefit from its use in convalescence from fevers, and debility connected with gastro-enteric irritation.

PREPARATIONS.

Fluid Extract.....	Dose, 15 to 60 drops.
Ptelein.....	" 1 grain.

Pulmonaria Officinalis.*(Lungwort.)*

Demulcent and mucilaginous. It may be used in all cases where this type of agents is indicated. Employed in catarrhal and bronchial affections, consumption, hemoptysis, tubercular diathesis and pulmonary disorders generally.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.

Pyrethrum Parthenium.*(Feverfew.)*

Tonic, carminative, emmenagogue, vermifuge and stimulant.

The fluid extract made into a warm infusion is an excellent remedy in colds, flatulency, worms, irregular menstruation, hysteria, suppression of urine, and in some febrile diseases. The cold infusion or extract makes a valuable tonic. The extract of feverfew in conjunction with the compound spirits of lavender, forms a very efficient medicine in hysteria and flatulency.

PREPARATION.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.

Quercus Alba.*(White Oak.)*

White oak bark is somewhat tonic, powerfully astringent, and antiseptic. Used with advantage in intermittent fever, obstinate chronic diarrhea, chronic mucous discharges, and in certain forms of passive hemorrhages; likewise in phthisis, and diseases attended with great prostration, colliquative sweats, &c. It will be found very serviceable when administered to sickly and debilitated children, and in severe diarrheas, particularly when the result of fevers. Aromatics, and sometimes castor-oil are essential adjuvants in dysenteric and diarrhetic cases. Drs. Ballard and Garrod state, that they know of few remedies more useful in leucorrhea. The decoction forms an excellent gargle for relaxed uvula and sore throat, and an astringent injection for leucorrhea, prolapsus ani, hemorrhoids, &c. See Journal of Materia Medica. vol. 1.

PREPARATIONS.

Fluid Extract.....Dose, $\frac{1}{2}$ to 1 dram.
 Solid "....." 10 to 20 grains.
 Pills, 2 grains....." 5 to 10.

Rhamnus Catharticus.*(Buckthorn.)*

Hydragogue cathartic. It was formerly held in high esteem for its remedial virtues in the treatment of dropsy, gout and rheumatism. It is used mainly as a syrup, adjuvant to hydragogue or diuretic mixtures. Buckthorn possesses griping qualities, and should always be administered in combination with carminatives.

PREPARATION.

Fluid Extract Dose, 1 to 1½ drams.

Rheum Palmatum.*(Rhubarb.)*

The medicinal properties of rhubarb are peculiar and valuable. Its most remarkable peculiarity is the union of the cathartic and astringent power, the latter not interfering with the former, as the purgative effect precedes the astringent. From its mildness it is an appropriate laxative in mild cases of diarrhea, chronic diarrheas and dysentery, by first evacuating any irritating matter contained in the bowels, and afterwards acting as an astringent. Also in convalescence from exhausting diseases, enfeebled condition of the bowels, dyspepsia attended with constipation, and scrofulous enlargement of the lymphatic glands. It is one of the best laxatives for general use in infancy, for it is not apt to act with unexpected violence, and its tonic and astringent virtues render it peculiarly fit for the treatment of infantile cases attended with enfeebled digestion and irritation of the alimentary canal, as well as in a variety of children's complaints, as cholera infantum, summer complaints, &c.

In nervous and putrid fevers it is preferable to saline and other purgatives. Dr. S. Jackson, late of Northumberland, speaks of rhubarb as a remedy of surprising efficacy in piles, when laxatives are needed. He directs a piece about ten grains in weight to be chewed, or rather slowly dissolved in the mouth every night, or less frequently according to the degree of constipation present. DEGGER recommended this agent in all stages of dysentery as abundantly able to effect the cure alone. Powdered rhubarb has been recommended by HOME as an application to old and indolent ulcers for the purpose of promoting their granulation. The fluid extract is a safe and convenient preparation in most cases where a laxative is indicated.

Rhubarb and Senna.

A combination of *rhubarb* and *senna* is suggested, instead of

the use of either of the simple extracts in cases where a simple cathartic is required. By the union of these drugs in the concentrated form of a *fluid extract*, and in due proportion, a cathartic is obtained which is safe, unattended by unpleasant symptoms, and not followed by constipation. The cases where a simple cathartic is needed are so numerous, that the preparation will be found useful to physicians, and a good family medicine for travelers and others who resort to this kind of purgative habitually.

Rhubarb Aromatic.

An agreeable, warming, digestive purgative. Its use is attended with the happiest results, strengthening and exciting the action of the stomach, and imparting tone to the digestive functions generally.

Rhubarb alone is inadvisable in cases of habitual constipation, on account of its subsequent astringent effect.—Pereira.

Incompatibles.—Strong acids, lime-water, sulphates of iron and zinc, tartar emetic, bichloride of mercury, vegetable astringents.

PREPARATIONS.

Fluid Extract Rhubarb	.....	Dose, $\frac{1}{2}$ to 1 dram
" " " Aromatic,.....	" $\frac{1}{2}$ to 1 "	
" " " and Senna,.....	" $\frac{1}{2}$ to 1 "	
Solid " ".....	" 2 to 10 grs.	
Pills " Rhubarb, 1 grain,.....	" 2 to 6.	
" " " and Magnesia, 2 grs.,.....	" 1 to 4.	
" " " and Iron, (U. S. P.) 8 grs.,...	" 2 to 8.	
" Rhubarb Compound, (U. S. P.) 4 grs.,.....	" 2 to 5.	
" Extract Rhubarb and Blue Mass, 4 grs.,.....	" 1 to 2.	

Rhus Glabrum.

(Sumac.)

Astringent and refrigerant, and, to an extent, febrifuge. It has been found valuable in gonorrhœa, leucorrhœa, diarrhœa, dysentery, hectic fever and scrofula. The infusion, as a gargle, is considered almost a specific in the sore throat attending mercurial salivation; and is much used internally in mercurial diseases. Syphilitic affections are said to be much benefited by a free use of sumac in combination with the barks of *slippery elm* and *white pine*. A poultice of the bark applied to ulcers and gangrenous conditions, claims attention for its antiseptic properties. The infusion, sweetened with honey, is serviceable in the same way, for cleansing the mouth in putrid fevers. It is a cooling drink in ulceration of the throat. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract.....	Dose, 1 to 2 drams
Rhusine.....	" 1 to 2 grains.

Rubus Villosus.*(Blackberry.)*

This is a tonic, aromatic stimulant, and strong astringent; has been long a favorite domestic remedy in bowel affections, and may be employed with great advantage in cases of diarrhea from relaxation of the bowels, whether in children or adults. Bigelow considers it a powerful astringent, and is satisfied of its efficacy in cases in which the vegetable astringents are found serviceable. Dr. Chapman speaks highly of it in the declining stage of dysentery, after the symptoms of active inflammation are removed; he asserts that nothing in his hands had done so much to check the inordinate discharges in cholera infantum—two or three doses sufficing to bind up the bowels. Southern Medical and Surgical Journal, also the Journal of Rational Medicine, also Journal of Materia Medica, &c., have published accounts of this agent, as producing extraordinary cures in chronic diarrhoea and dysentery, in cases where all other remedies had failed, and in the shortest possible time. It is well adapted to relaxed conditions generally of the gastro-intestinal mucous membrane, to passive hemorrhage from the stomach, bowels, and to atonic dyspepsia. In atonic diarrhoeas of children, especially is it worthy of notice.

Blackberry is said to exert an influence over the uterus during parturition, exciting its contraction when other remedies have failed.

The compound syrup with aromatics, recommended by Surg. Gen'l. Finlay, for use in the atony in chronic diarrhoea, is an excellent form for its use. See Journal of Materia Medica, vol. 1

PREPARATIONS.

Fluid Extract,	Dose, $\frac{1}{2}$ to 1 dram.
Solid "	" 4 to 6 grains.
Pills, 2 grains,	" 2 to 3.

Rumex Crispus.*(Yellow Dock.)*

Astringent and gently tonic, and is supposed to possess an alterative property. It is said to have proved useful in scrofula and syphilis. The extract is astringent, alterative, and tonic, uniting a laxative power with these, and resembling *rhubarb* in its mode of operation. It is considered eminently useful in scorbutic, scrofulous, scirrhus, and syphilitic affections, leprosy, elephantiasis, &c. Dr. Salsbury speaks of its employment in cutaneous eruptions, and as having attracted considerable attention in the treatment of itch. An ointment of *rumex crispus* and root-bark

of *celastrus scandens* is confidently affirmed by others, to form an infallible remedy for this disorder.

Induration of Liver.—The fluid extract of *rumex crispus*, in combination with a small quantity of the fluid extract of *bella-donna*, is useful in such indications, when complicated with jaundice, and causing dyspepsia or palpitation of the heart.

IMMEDIATE effects must not be expected to follow the use of this agent. Recently it has been used quite extensively in syrups and extracts.

PREPARATIONS.

Fluid Extract.....	Dose, 1 to 2 drams.
Solid "	" 4 to 8 grains.
Rumicin	" 4 to 8 "
Pills of Solid Extract, 2 grains..	" 1 to 2.

Ruta Graveolens.

(Rue.)

Emmenagogue, ecboic, anthelmintic, and anti-spasmodic. This agent has been successfully employed in flatulency, colic, hysteria, epilepsy, many nervous disorders, and nervous disturbances caused by worms. Dr. Thompson found an enema of the strong infusion of service in convulsions of children arising from flatulency. *It should be administered, in every form with caution. In large quantities, it operates as a narcotico-acrid poison.*

If administered during pregnancy, it is very liable to produce abortion, accompanied with gastro-enteritis and cerebral disturbances. In moderate doses, this agent proves an emmenagogue, while in large doses, it determines irritation of the uterus.

PREPARATIONS.

Fluid Extract	Dose, 20 to 40 drops.
Solid "	" 2 to 4 grains.
Pills, 2 grains.....	" 1 to 2.

Sabbatia Angularis.

(Centaurry Red.)

An excellent, pure, bitter tonic, without astringency.

Bigelow readily attests its utility; and Eberle considers it one of the most reliable of the tonic remedies. Employed in fall periodic febrile diseases, both as a prophylactic and a remedy; useful in dyspepsia and convalescence from fevers; but principally to invigorate the stomach and alimentary canal.

The fluid extract made into a warm infusion has received considerable notoriety for discussing worms, and for restoring the menstrual secretions. See Journal of Materia Medica, vol. 2.

PREPARATION.

Fluid Extract	Dose $\frac{1}{2}$ to 1 dram.
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Salvia Officinalis.*(Sage.)*

Sage unites a slight degree of tonic power and astringency with aromatic properties. Beneficial in flatulence connected with gastric debility, efficacious in restraining the exhausting sweats of hectic fever, or to allay nausea. The infusion, which may be prepared from the fluid extract, is an excellent anthelmintic and for the purpose of causing diaphoresis in some febrile complaints, as a gargle for inflammation and ulceration of the throat, and relaxed uvula, either alone or combined with appropriate remedies.

It has achieved considerable notoriety in spermatorrhoea and as an antaphrodisiac.

PREPARATION.

Fluid Extract, Dose, $\frac{1}{4}$ to 1 dram.

Sambucus Canadensis.*(Elder Flowers.)*

The fluid extract of the flowers when made into a warm infusion is diaphoretic and gently stimulant; in cold infusion, diuretic, alterative and cooling.

Elder flowers may be used in all diseases requiring such action, as in hepatic derangements of children, erysipelatous diseases, &c.

In erysipelas, elder flowers both as a laxative and cooling medicine, are exceedingly valuable.

PREPARATION.

Fluid Extract, $\frac{1}{4}$ to 1 dram.

Sanguinaria Canadensis.*(Bloodroot.)*

Acrid emetic, with narcotic and stimulant properties, expectorant, sudorific, alterative, emmenagogue, tonic, antiseptic, detergent, escharotic and errhine, according to the mode in which it is employed. It is actively stimulant in its primary operations.

In small doses, it excites the stomach, and accelerates the circulation; more largely given, produces nausea and consequent depression of the pulse; and in the full dose occasions active vomiting. The effects of an over-dose are violent emesis, faintness, a burning sensation in the stomach, vertigo, tormenting thirst, dimness of vision, and alarming prostration.

The powder, applied to fungous growths, and indolent ulcers, proves of utility, removing the former by its escharotic action and creating in the latter a new and healthy energy. The fluid

extract made into an infusion with vinegar has been found valuable in removing ringworms, warts, &c.

"Bloodroot has been given in typhoid pneumonia, catarrh, pertussis, croup, phthisis, pneumonitis, scarlatina, rheumatism, jaundice, dyspepsia, hydrothorax, and some other affections, either as an emetic, nauseant or alterative, and its virtues are highly praised by many judicious practitioners. Dr. Mothershead, of Indianapolis, speaks in the strongest terms of its efficacy as an excitant to the liver, given in alterative doses." Dr. R. G. Jennings has found it more efficient as a gargle in scarlatina than any other that he has employed. Of the sanguinarin, Dr. Chas. A. Lee says, "It acts very beneficially in chronic bronchial and hepatic affections. It seems to stimulate all the secretions, and will doubtless, prove a useful general alterative." Dr. Branch, of S. C., has employed bloodroot in croup, and prefers it to any other single remedy: and, by persisting in it till emesis is produced, he is of opinion that it prevents the formation of the diphtheritic membranes. See *Journal of Materia Medica*, vols. 5 and 6.

Contra-indications.—All states of high general excitement or active local inflammation.

PREPARATIONS.

Fluid Extract,	Dose, 5 to 15 and 40 to 60 drops.
Solid "	" $\frac{1}{4}$ to $1\frac{1}{4}$ and $2\frac{1}{4}$ to 5 grains.
Sanguinarina,	" 1-30 to 1-10 grain.
Sanguinarin,	" $\frac{1}{2}$ to 1 and $\frac{1}{4}$ to 2 "
Pills of Sanguinarina, $\frac{1}{4}$ grain,	" 1 to 3.
" " 1 "	" 1 to 5.
" Sanguinarin, $\frac{1}{4}$ "	" 1 to 4.
" " 1 "	" 1 to 2.

Scilla Maritima.

(*Squill*.)

Squill is expectorant, diuretic, and in large doses, emetic and purgative. It is seldom used as an emetic or cathartic, on account of its uncertainty in producing these effects. It is used as a diuretic in dropsies, and in chronic pulmonary affections, such as chronic catarrh, humid asthma, winter cough, &c.; it is also employed as an expectorant. As an expectorant it is used both in cases of deficient and superabundant secretion from the bronchial mucous membrane. Troublesome vomiting or purging caused by squill is best corrected by opium. It is contra-indicated, where there is much inflammation or vascular excitement. It will be found useful in chronic bronchitis complicating emphysema, and in all the forms of chronic and subacute catarrh. Under these circumstances, it is most usually combined with *senega*. It is also much employed as an ingredient in the compound *syrup of squill*.

which is so popular a remedy in spasmodic croup. In the decline of spasmodic and even membranous croup, squill may be of service in promoting secretions from laryngeal mucous membrane.

As a diuretic, few medicines excel it, and hence it is in universal use for all forms of dropsy. Sometimes it produces a rapid evacuation of the water by vomiting and purging; this is particularly the case when it is associated with tartar emetic, or with saline cathartics. As a general rule, it is given in combination with *digitalis* and *blue mass*, (of each, one grain three or four times a day.) The calomel is supposed to excite absorption, while the squill increases the secretory action of the kidneys. In order to lessen its injurious action on the stomach, it may be conjoined with the *aromatic spirit of ammonia*. In the hydrocele of young subjects, says Dr. Waring, a radical cure has occasionally been effected by the local external application of acetum scillæ. It causes desquamation and subsequent absorption of the fluid. A salve made with powdered *squill* was anciently used as a remedy for warts, and some modern writers vouch for its efficacy.

When used alone, its diuretic effects are seldom observed, if purging or emesis is produced, and consequently, when the first of these effects be desired, the medicine should be given in small doses, and discontinued on occurrence of nausea. In dysuria, says Dr. Waring, I have used a combination of acetum scillæ, (fluid extract one ounce, diluted acetic acid eight ounces,) sp. ether nit., in equal parts, with more uniform success, than any other internal remedy. Of this mixture, 3 ss in aq. anisé fl 3 ij,; may be repeated every hour.

Squill Compound.

Squill compound is composed of *squill* and *seneka*. The properties of these agents are nearly identical and, in a conjoined state, become eminently valuable in catarrhal and bronchial affections attended with deficient or excessive secretions, and in some dropsical conditions.

Incompatibles.—Lime water, alkaline carbonates, nitrate of silver, acetate of lead.

PREPARATIONS.

Fluid Extract Squill,.....	Dose, expectorant and diuretic, 2 to 6 drops.
" " " ".....	" emetic,..... 12 to 24 "
" " " Compound ".....	10 to 20 "
Pills Squill Comp., (U. S. P.), 3 grs,	Dose, 2 to 3.
" " " and Ipecac, (U. S. P) 3 grs.....	" 2 to 3.

Scutellaria Lateriflora.

(*Sculcap*.)

Sculcap ranks among the most valuable of its class—nervines.

Its action is said not to be immediate, but to follow a persistent use. It can be given to all classes, in almost any stage of disease, with safety. It possesses not only a remarkable power of controlling nervous excitability, as manifested in patients of an irritable temperament when fatigued, over-excited, or suffering from slight physical derangements. But its most valuable properties are developed in several cases, as when the most active and potent means are required in delirium tremens, tic-doulooureux, St Vitus's dance, convulsions, tetanus, as well as the ordinary diseases of the nerves. Those, who have long used the plant, claim for it tonic properties, which give strength as well as quiet to the system, sudorific and diuretic powers, and that it never leaves the system in an excited and irritable condition when its effects have passed off, as often occurs with other nervines

This article has proved especially useful in chorea, convulsions, tremors, intermittent fever, neuralgia, and all nervous affections. In delirium tremens, using it freely will soon produce a calm sleep. Where teething has impaired the health of children, it may be given with advantage. In all cases of nervous excitability, restlessness or wakefulness, attended with acute or chronic diseases, or from other causes, it may be taken freely with every expectation of beneficial results.

Dr. Bates, in a communication to the Boston Medical Journal, says he has used it with general success in the treatment of diseases attended with nervous irritation, irritability, restlessness, &c. In the treatment of children it is invaluable for allaying these symptoms. The dose is a teaspoonful, repeated as often as the circumstances or indications require. It may be relied upon in some forms of hysteria. Patients convalescing from typhoid fevers, pneumonitis, arthritis, &c., or any disease, with those symptoms, will be shortly relieved by one or two teaspoonfuls of this preparation. I have no hesitation in saying that those, who give it a fair trial, will find it efficient in the treatment of many diseases, for the relief of which small doses of opium are frequently given, without any of its unpleasant consequences.

PREPARATIONS.

Fluid Extract of Scullcap.....	Dose, $\frac{1}{2}$ to 1 dram.
" " " Compound.....	" $\frac{1}{2}$ to 1 "
Scutellarin.....	" 2 to 6 grains.
Pills of Scutellarin, 1 grain	" 2 to 6.

Secale Cereale. (Secale Cornutum.)

(*Ergot, Spurred or Smut Rye.*)

Narcotic, styptic, and ecbotic. Used on account of its power

of promoting uterine contraction in languid natural labors. Administered to facilitate abortion when it has commenced, also to check uterine hemorrhage in the gravid or non-gravid state. It has proved serviceable in hemorrhage from other organs, as the lungs, stomach, and in retained placenta. It has been recommended in small doses in painful dismenorrhea, where membranous shreds pass off; also in gonorrhea, gleet, chronic diarrhea and dysentery, paraplegia, paralysis or debility of the bladder, and of the rectum, spermatorrhea, hysteria and intermittent fever.

A dangerous poison if taken into the body mixed with food, producing violent spasmodic convulsions, and dry gangrene; if taken in very large doses, giddiness, headache, and flushed face are produced, together with pain and spasms in the stomach, nausea and vomiting, with colic, purging, and a sense of weight and weariness of the limbs: in pregnant women it is found to excite uterine action in a very remarkable manner, bringing on abortion, or facilitating parturition; hence, *ergot* is called by Dr. Pereira, a parturifacient. In medicine it is extensively employed to promote uterine pains during the process of parturition, to produce the expulsion of the placenta, contraction of the uterus, and to stop uterine hemorrhage. To a more limited extent it has been used, and, as it is said, with advantage, in epistaxis, hemoptysis, hæmaturia, and hæmatemesis, to expel clots and polypus from the uterus, leucorrhæa, puerperal convulsions, and amenorrhæa.

Dr. Montgomery, of Madras, speaks in favor of the ethereal preparation of ergot. In the *American Medical Monthly*, Dr. O. H. Smith says that he looks upon ergot as almost a specific for mania-a-potu. He gave the tinct. in half teaspoonful doses. Prof. Baker states that he never knew ergot to fail in giving relief to retention of urine after labor.

Dr. Meigs advises that it should be given at the moment, or just after parturition, in order to secure a permanent contraction of the uterus, especially in women subject to hemorrhage. Dr. C. L. Mitchell used ergot, satisfactorily, in spermatorrhea, administering it daily in doses of one-half dram to a dram. See *Journal of Materia Medica*, vol. 3 and 5.

Contra-indications.—Rigidity of the uterus; deformity of pelvis; mal-presentation; serious obstacles to delivery; morbid adhesion of placenta, &c.

PREPARATION.

Fluid Extract, Ethereal. Dose, $\frac{1}{4}$ to 1 dram

Senecio Aureus.

(*Life Root.*)

A certain diuretic and diaphoretic. Life root has proved an

excellent medicine in gravel and other urinary affections, either alone, or given in combination with other diuretics; and is said to be a specific in strangury. The extract is a powerful emmenagogue, when given in the form of warm infusion.

Life root possesses pectoral and tonic properties also; may be given with advantage in pulmonary and hepatic affections. As a nervine, said to be efficacious in allaying nervous irritation of the system generally, more particularly for syphilitic and irritative cough.

In the treatment of female diseases, it is deemed a most valuable remedy.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{2}$ to 1 dram.
Senecin.....	" 3 to 5 grains.

Simaruba Excelsa.

(*Quassia*.)

Bitter tonic and stomachic, febrifuge and anthelmintic. Quassia possesses many advantages over other vegetable bitters; it is free from all constipating properties; it is purely tonic, invigorating the digestive organs, with very little increase of circulation, or increase of animal heat. It is used sometimes in remittent and intermittent fevers, likewise in dyspepsia, debility from exhausting diseases, and is advantageous as an anthelmintic.

Dr. Lettsom states that he has administered quassia with eminent success, in low remittent and nervous fevers, and, that too, after cinchona had failed him. It is strongly recommended, by the same authority, in the advanced stage of diarrhea. Dr. Waring regards it as almost a specific against lumbrici; the extract must be given three or four days consecutively, and then followed by a brisk purge.

Incompatibles.—Nitrate of silver, acetate of lead, &c.

PREPARATIONS.

Fluid Extract.....	Dose, $\frac{1}{4}$ to 1 dram.
Solid ".....	" 3 to 5 grains.
Pills, 1 grain.....	" 3 to 5.

Smilax Officinalis.

(*Sarsaparilla*.)

Sarsaparilla is generally considered as an alterative, although stated by some to possess diuretic, diaphoretic and emetic properties.

This agent possesses a high reputation as an alterative, in the treatment of chronic rheumatism, scrofulous affections, cutaneous

affections, inveterate syphilis, pseudo-syphilis, syphiloid diseases generally, and struma in all its forms.

It possesses the power of purifying the blood, regulating the secretions, and comporting as a general alterative. It will be found to be highly advantageous in the treatment of that shattered state of the system which oftentimes follows an imprudent use of mercury in syphilitic affections, as also in that depraved condition of the general health to which it is difficult to apply a name.

It has also been advised in chronic rheumatism, cutaneous diseases, passive and general dropsy, gonorrheal neuralgia, and other depraved conditions of the system, where an alterative is required.

Incompatibles.—Infusion of galls, lime-water, acetate of lead.

Sarsaparilla Compound.

In this compound sarsaparilla is conjoined with *Prince's pine, liquorice, mezereon, sassafras, yellow dock, and bittersweet.*

It possesses the power of increasing the secretions generally, and may be employed with much confidence in those cachectic conditions of the body dependent on cutaneous diseases, scorbutus, syphilis, ulcers, &c.

Sarsaparilla and Dandelion.

Alterative and moderately tonic and aperient. The uses of this compound will readily be suggested.

PREPARATIONS.

Fluid Extract of Sarsaparilla, American,.....	Dose, 1 dram.
" " Rio Negro.....	" 1 "
" " Compound, (U. S. P.),....	" 1 "
" " and Dandelion,.....	" 1 "
Solid Extract of Sarsaparilla, American,.....	" 5 to 20 grains.
" " " Compound....	" 5 to 20 "
" " Rio Negro,.....	" 5 to 15 "
" " " Compound,....	" 5 to 15 "
Pills of each of the Solid Extracts, 3 grains,.....	" 2 to 5.

Solanum Dulcamara.

(*Bittersweet.*)

Narcotic, alterative, diuretic, diaphoretic, and slightly tonic. Dulcamara has been chiefly used in cutaneous and syphilitic diseases, rheumatic and cachectic affections, ill-conditioned ulcers, scrofula, indurations from milk, leucorrhoea, jaundice, and obstructed menstruation; but it is now mainly confined to the treatment of cutaneous eruptions, particularly those of a scaly character, as lepra, psoriasis, and pityriasis. In these complaints it is often beneficial, especially with minute doses of the antimonials. It is said to have been beneficially employed in chronic rheumatism, and chronic catarrh. When taken in over-doses it produces nau-

sea, vomiting, vertigo, and spasmodic action of the muscles. With many persons, the face and hands become purplish, and the circulation depressed while under its influence. Antaphrodisiac properties are claimed for it, and it has proved useful in mania, in which the venereal functions were strongly excited. Equal parts of *solanum*, *rumex*, and *stillingia*, made into a syrup, form a valuable preparation for scrofulous affections, as well as syphilitic.

It is employed externally in the form of ointment, as a discutient to painful tumors, also to some forms of cutaneous diseases, ulcers, and erysipelatous affections. It has been thought to be most evidently useful in those cases of pulmonary diseases, which have followed directly upon the sudden disappearance of a cutaneous eruption. To its sedative virtues may be ascribed its efficiency in rendering coughing less frequent and severe; in allaying the spasmodic action produced by emphysema and whooping-cough, and its reputed curing of certain cases of phthisis.

The most inveterate cases, says Gardner, of pustular, vesicular, as well as scaly eruptions, yield to its influence, when perseveringly administered. Its utility in chronic eczema, acne, impetigo of face, and ecthyma vulgare, in persons of a scrofulous diathesis, is highly recommended.

PREPARATIONS.

Fluid Extract,	Dose, $\frac{1}{4}$ to 1 dram.
Solid "	" 8 to 8 grains.
Pills, 2 grains,	" 2 to 4.

Solidago Odora.

(Golden Rod.)

The extract is aromatic, moderately stimulant and carminative; and diaphoretic when given in warm infusion. It may be used to relieve pain arising from flatulency, to allay nausea, and to mask the taste or correct the operation of unpleasant medicines, such as laudanum, castor oil, etc. Sometimes employed as an astringent in dysentery and ulceration of the intestines, diarrhea and cholera morbus.

PREPARATION.

Fluid Extract,	Dose $\frac{1}{4}$ to 1 dram.
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Spigelia Marilandica.

(Pink Root.)

This plant is a well-known indigenous anthelmintic, possessed of narcotic and cathartic powers. Dr. Parton found it also useful in the fevers of children, not proceeding from verminous irritation, as from those, for instance, consequent upon hydrocephalus. When a full dose is given at night, it is well to follow it by a

purge in the morning. It is usually combined with *senna* or some other cathartic, to insure its action on the bowels. The *pink root* compound is composed of the same ingredients as those that enter into the well-known *worm tea*.

In large doses it is apt to purge, and likewise produce symptoms of narcotism, exciting the circulation determining the blood to the brain, giving rise to vertigo, dimness of vision, dilated pupils, spasms of the facial muscles, and sometimes even causing convulsions. Spasmodic movements of the eyelids are among its most common attendants. These narcotic effects are less liable to occur when the medicine purges, and are entirely obviated by combining it with cathartics. Barton long ago, said "It may be doubted whether there is in the whole series of anthelmintics yet known a more efficacious remedy against worms." Dewees styles it "The most decidedly efficacious remedy." Eberle says "It seldom fails."

It appears to act strictly as a vermicide. Dr. Pereira's testimony in favor of *spigelia*, particularly against *lumbrici*, is very strong. Though popularly deemed dangerous, he states, of the many hundred cases in which he employed it, in no one instance did he witness any unpleasant consequences.

Stillé adds that the alterative and tonic effects of this medicine are not as fully appreciated as they deserve to be.

Spigelia and Senna.

This fluid extract is a very agreeable and grateful medicine; possessing both purgative and anthelmintic properties. The dose for an adult is from two to four drams. It is a popular and efficient medicine for children troubled with worms and torpidity of the bowels.

Spigelia Compound.

Composed of *pink root*, *senna*, *savin*, and *manna*. Active cathartic and vermifuge. This compound is decidedly a pleasant and efficient medicine, in those states of the system produced by worms, which resemble infantile remittents, and other febrile diseases.

PREPARATIONS.

Fluid Extract of Pink Root,	Dose, $\frac{1}{2}$ to $1\frac{1}{2}$ drams.
" " Compound,	" $\frac{1}{2}$ to 2 "
" " and Senna,	" $\frac{1}{2}$ to 1 "

Spiræa Tomentosa.

(*Hardhack*.)

Hardhack is tonic and astringent. It is regarded as an excellent

medicine in diarrhea, cholera infantum, and other complaints in which astringents are indicated. It possesses one advantage over many agents of its class, in that it is less apt to disagree with the stomach. As a tonic, it may be given with benefit in cases of debility, with want of appetite. See Journal of Materia Medica, vol. 1.

PREPARATIONS.

Fluid Extract, Dose, 4 to 20 drops.
 Pills, 2 grains, " 1 to 4.

Statice Caroliniana.

(*Marsh Rosemary.*)

Statice is powerfully astringent. In large doses it acts as an emetic, and in smaller quantities, as a powerful expectorant; it also possesses considerable antiseptic power.

It may be used for all the purposes for which *kino* and *catechu* are given; good application in aphthous and ulcerative affections of the mouth and fauces. It is said to be highly useful in *cy-nanche maligna*, both as an internal and local remedy.

Dr. Balies, of Massachusetts, found it highly serviceable in this disease. It is also given with advantage in *S. Anginosa*, and in aphthous fevers attendant on dysentery.

Prof. V. Mott, from experimental knowledge, confidently speaks of its service in chronic dysentery after the inflammatory symptoms had subsided. Drs. Bigelow and E. Parish make favorable mention of it in the same complaint.

May be employed in the form of extract, infusion or decoction. It will be found efficacious in diarrhea and dysentery, particularly in the latter stages. The decoction is useful as an injection in chronic gonorrhoea, gleet, leucorrhoea, prolapsus ani and uteri, and in some ophthalmic affections. See Journal of Materia Medica, vol. 1.

PREPARATION.

Fluid Extract, Dose, 15 to 40 drops.

Stillingia Sylvatica.

(*Stillingia.*)

In large doses, it is emetic and cathartic; in small doses, alterative, with marked influence over the secretions, which is unsurpassed by any other known alterative. It was first introduced to the notice of the profession by Dr. T. Y. Simons of South Carolina, as a valuable alterative remedy in syphilitic affections and others ordinarily requiring the use of mercury. From the reports of those who have given it a trial, there seems to be no doubt of its

valuable properties; indeed, its friends claim for it no rival in the vegetable kingdom, in the treatment of secondary syphilis, scrofula, cutaneous diseases, chronic hepatic affections, and other complaints ordinarily benefited by alteratives.

It seems to act prominently upon the glandular and cutaneous system; and in the treatment of glandular enlargements, it is usually combined with tonics and other agents capable of equalizing the nervous circulation. In scorbutic affections, in combination with *phytolacca*, *rumex*, and *blue flag*, it has given great satisfaction.

In the form of fluid extract, combined with oils of *anise* or *caraway*, it has been found very beneficial in chronic laryngeal and bronchial affections, and in leucorrhœa.

As an external stimulating application, the oil will be found valuable in many instances.

One drop of it placed upon the tongue, and repeated three or four times a day, is reported to have proved successful in cases of severe croup.

Stillingia Compound.

A compound fluid extract is prepared, containing *stillingia*, *turkey corn*, *blue flag*, *Prince's pine*, *prickly ash*, *bittersweet*, *conium* and *ginger*, and regarded as one of the most potent remedies in all chronic diseases. It fulfills most of the indications of mercury. Eminently fitted for the legion of disorders which require alterative treatment. The office of prickly ash is to stimulate and impart strength to mucous tissues; to give increased vitality to the system generally.

PREPARATIONS

Fluid Extract of Stillingia.....	Dose,	5 to 15 drops.
“ “ Compound.....	“	½ to 1 dram.
Stillingin.....	“	2 to 5 grains.
Pills of Stillingin, 1 grain.....	“	2 to 5.

Strychnos Ignatii.

(*Ignatia Amara*—*St. Ignatius Bean*.)

The *ignatia* is allied, both in botanic and medical properties, to the *nux vomica*, *strychnia* being the active principle of each.

The specific use of the *ignatia* may be stated thus:—It has a tonic, stimulating effect on all the organs under the influence of the ganglionic system of nerves, by its acting directly upon them, exciting and equalizing their weakened and disturbed action, and consequently restoring to their equilibrium the digestive functions.

That condition of the body, indicated by a great number and variety of symptoms called dyspepsia, is clearly dependent upon

weakened and imperfect action of the digestive organs. The organ of the digestive apparatus, in consequence of its direct exposure to so many irritating substances, and its intimate sympathetic communications, is affected with many forms of subacute and chronic gastric irritation, and inflammation, giving rise to general weakness uneasiness of body, and a host of distressing sensations, while, at the same time, the moral and intellectual faculties are, in their turn, liable to be affected by these disordered functions. The stomach and duodenum are the most eminent of the digestive organs, and these are connected together, as well as combined with all their congeries appropriated to the perfect elaboration of the nutritive and sustaining principles of the economy, by the ganglionic system of nerves. The stomach is the centre of the digestive apparatus, and owes this character to its intimate union with the great solar plexus, the centre of the brain if it may be so termed, of the ganglionic system, regulating the nutritive functions. It is very clear, therefore, that excesses of any kind, or modes of life, that do not give these organs their appropriate play, or weaken it by over-action, and so, in either case, destroying the equilibrium of the functions, must tend, to a greater or less degree, to deaden the action of this entire system of nerves. In connection with this fact, we have it clearly shown, by experiment, that the strychnine combinations act mainly, if not exclusively, on this system of nerves; and the philosophic adaption of the remedy to the disease is evident in the numerous symptoms evincing a derangement of the digestive apparatus in the cases of persons having been overcome, and the system restored to a healthy tone by the use of the *ignatia*.

The *ignatia* appears to be used quite indiscriminately in the countries where it is a native, though how far, beyond what has been stated, it is useful as a remedial agent remains to be shown from the experiments of our hospital and other practitioners. The large amount of strychnia in the *ignatia* calls for great care in administering it, and also for especial attention on the part of the profession towards discovering some available antidote for the poison when taken in the pure alkali or in its combinations. *Olive oil, lard, and morphine have been used, as also chlorine, bromine and iodine, in the endeavor to form an insoluble salt with the strychnia; but the absolute necessity of immediate action has given these antidotes only indifferent success. See Journal Materia Medica, March, 1858.*

PREPARATIONS.

Fluid Extract,.....	Dose, 3 to 8 drops.
Solid ".....	" $\frac{1}{4}$ to 1 grains.
Pills, $\frac{1}{4}$ grain.....	" 1 to 8.

Strychnos Nux Vomica.

(*Nux Vomica.*)

Possesses tonic and other properties. It exerts its influence principally on the cerebral system, and the nerves of motion, probably through the medium of the spinal marrow.

Paralysis.—The first suggestion of this remedy for paralysis was made by Fouquier, in 1811. His experience taught him that it must be used with great circumspection in paralysis depending on lesions of the brain or spinal marrow, and that its power was chiefly manifested in functional forms of the disease, or peripheral paralysis, produced by venereal excesses, abuse of opium, alcoholic intoxication, lead poisoning, anger, fright, gout, and rheumatism, concussion of the spinal marrow, hysteria, &c. As early as 1823, ANDRAL showed its power in lead palsy. In 1830 DR. GEDDINGS, of South Carolina, reported several cases of paralysis from drunkenness cured by this medicine. In the same year, DR. J. L. BARDSLEY published an account of his success in a large number of cases, pointing out its peculiar value in those cases unconnected with lesions of the nervous centres, and especially in paraplegia. The administration of strychnia in paralytic affections should be very cautiously conducted. Beginning with one-twentieth, or from that to one-twelfth of a grain daily, the dose may be gradually increased until some jerking or tension is felt in the paralyzed muscles. At this point the agent may be suspended, or its quantity diminished.

Amaurosis.—DR. MIDDLEMORE, of Birmingham, also SHORT, LISTON, GUTHRIE, &c., recommend this agent in amaurosis. Dr. M. found but slight advantage from its internal use, but preferred its endermic application to a blistered surface above the eyebrow. He commenced with the daily application of a quarter of a grain, and gradually increased this quantity to two grains, keeping the blister open by a dressing of savin cerate. PETREQUIN cured several cases under similar conditions.

Prolapsus of the Rectum.—SCHWARTZ used in this complaint, the extract of nux vomica with great advantage, both for children and adults. For the former, he dissolved two grains in two drams of water, and of this solution gave two or three drops to infants, and from six to fifteen drops to older children. DUCHAUSSOY used strychnia with perfect success in a case of four years standing. Mr. A. JOHNSON effected a cure by applying one sixteenth of a grain of strychnia upon a blistered surface over the coccyx. KOCH, of Stuttgart, was successful in a case of fifteen years duration, by means of injections of cold water containing twelve drops of the tincture of nux vomica. This remedy is said to be useful for incontinence of urine, and retention of urine.

Sexual impotence has been successfully treated with strychnia. In chorea, there is strong evidence of its anti-spasmodic virtues. Numerous cases of chorea are reported as having been cured by this agent. In epilepsy, nux vomica was asserted, in the time of MURRAY, to be a valuable remedy. Spasm of the œsophagus is reported as cured by this drug. Several authors recommend nux vomica in intermittent fever. In many forms of dyspepsia, this medicine is extremely useful.

Constipation.—"Nux vomica," says Dr. COPLAND, "has been useful in cases depending on deficient tone of the muscular coat of the large bowels, in combination with a pill of aloes and myrrh, or with the compound extract of colocynth." TROUSSEAU recommends strychnia particularly for the sluggishness of the bowels which affects old persons, or those who have become prematurely feeble, and whose digestion is consequently sluggish and laborious. WEBBER confirms these statements, adding that minute doses act more efficiently than larger ones. HOMOLLE is stated not only to have relieved, or removed, by its means, impacted fæces, but actually to have relieved strangulated hernia, when the necessity of an operation seemed inevitable. SOPEZ's testimony is similar. The tonic influence of this agent upon the bowels is manifest in some forms of dysentery. RECAMIER prescribed it with advantage in chronic diarrhoea. Nux vomica was long recommended as a remedy for lumbrici, associated with drastic cathartics.

Antidotes.—Morphia is probably the best. Camphor and sweet oil have been advised as antidotes, but further investigations are required before they can confidently be relied upon. M. Duclos states that under the influence of positive electricity, the symptoms of poisoning by strychnia increase, while they lessen, or cease altogether, when negative electricity is applied.—*King.*

PREPARATIONS.

Fluid Extract.....	Dose, 5 to 15 drops.
Solid ".....	" $\frac{1}{2}$ to 1 grain.
Pills, $\frac{1}{2}$ and $\frac{1}{4}$ grain.....	($\frac{1}{2}$ grain), " 1 to 4.

Symphytum Officinale.

(*Comfrey.*)

Comfrey is demulcent, and somewhat astringent.

The therapeutic effects of comfrey are due to its mucilaginous properties, which act upon mucous membranes. Internally, it is employed with markedly good effects in pulmonary and other complaints in which these tissues are implicated. It belongs to that class of agents, by which scrofulous and anæmic conditions are beneficially treated.

Useful in diarrhea, dysentery, coughs, hemoptysis, other pulmonary affections, and in leucorrhea and female debility.

PREPARATION.

Fluid Extract, Dose, 2 to 4 drams.

Symplocarpus Fœtidus.

(*Skunk Cabbage*.)

Skunk cabbage is stimulant, anti-spasmodic, and narcotic.

In large doses, it will occasion nausea, vomiting, vertigo and dimness of vision. The root is officinal, though the seeds and roots are equally powerful; possessing when fresh, an acid taste.

The leaves, when bruised, form a very good stimulating application to blisters.

It was introduced at first as a remedy for asthma, and it has since been considered an excellent remedy in catarrh, chronic coughs, hysteric paroxysms, dropsy, rheumatism, and even epilepsy.

Its expectorant qualities have rendered it useful in whooping-cough, and pulmonary affections.

PREPARATION.

Fluid Extract, Dose, 20 to 80 drops.

Tanacetum Vulgare.

(*Tansy*.)

Aromatic tonic, and anthelmintic. In the warm infusion, possessing both emmenagogue and diaphoretic properties.

Some authors claim for tansy a moderate stimulus to the alimentary tube. In over-doses, baneful consequences follow its use. In small doses, it will be found useful in convalescence from exhausting diseases, in hysteria, and dyspepsia complicated with flatulency. The vinous preparation is said to be beneficial in strangury, and in debility of the kidneys.

Tansy is regarded especially serviceable in worms. Dubois, Burgeois, and Geoffroy attest its real value as a vermifuge. Hoffmann deems an enema of milk and tansy as one of the best means of destroying ascarides. Dubois relates a case of tænia which was cured by this drug. Schenklius, by its use, produced the expulsion of more than one hundred lumbrici. Among other complaints in which its remedial virtues have been tested, are rheumatism, gout, irregular or suppressed menstruation.

PREPARATION.

Fluid Extract, Dose, $\frac{1}{4}$ to 1 dram.

Taraxacum Dens-Leonis.~~XXXX~~

(Dandelion.)

One of the most valuable properties of dandelion consists in its local action on the liver; a torpid state of this organ produces those symptoms which are known as bilious. A disordered state of the liver is intimately related to that most common of all diseases, dyspepsia. The bile, which is naturally stimulus in promoting peristaltic action of the bowels, is increased when deficient, and improved when vitiated; various medical authors mention its use and success in deranged conditions of the digestive organs connected with an abnormal state of the liver, and in dropsical effusions arising from the same cause.

A peculiar nervous susceptibility common among dyspeptics, caused by the action of unhealthy acrid bile upon the irritable mucous surface of the bowels, in which a variety of distressing apprehensions occur, such as sudden death, approaching illness, or great personal danger, together with an utter inability of fixing the attention upon any subject, or engaging in any thing that demands exertion, may be relieved or entirely cured by a faithful use of the extract.

Its use in jaundice has been highly extolled by many writers of established reputation, and is sustained by the experience of physicians of the present day.

As an aperient it acts gently and without weakening the system.

In promoting healthy secretions and restoring the various functions of the system to a state of health and vigor, it is unsurpassed by any other medicinal agent.

Taraxacum and Senna.

This preparation is in favor with many practitioners as an anti-bilious purgative. It is used successfully with children, readily taken by them, seldom producing pain or nausea, and not likely to cause constipation. This extract is largely employed as a substitute for castor oil.

Taraxacum Compound.

Compounded of *dandelion*, *mandrake* and *conium*. This compound appears to be indicated in a large number of widely diversified complaints, such as torpidity of the liver, bowels, and of secretions and functions generally, in syphilis, cutaneous and strumous affections, and when a salutary change in any disease is to be produced only gradually and that too without any sensible evacuations.

Incompatibles.—Bi-chloride and chloride of mercury, sulphate of iron, nitrate of silver, acetate of lead, infusion of galls, &c.

PREPARATIONS.

Fluid Extract of Dandelion,.....	Dose, 1 to 2 drams.
Solid " "	" 10 to 20 grains.
Fluid " " and Senna,.....	" 1 to 2 drams.
" " Compound,.....	" 1 to 2 "
Pills, 8 grains,.....	" 8 to 6.

Thymus Vulgaris.

(Thyme.)

Aromatic tonic, emmenagogue, carminative, and anti-spasmodic. It is regarded of service in hysteria, dysmenorrhea, flatulence, and cephalalgia. Thyme is beneficial in an irritable and weak state of the stomach, in convalescence from exhausting diseases.

It promotes the appetite and favors the early reestablishment of digestion.

PREPARATION.

Fluid Extract,.....Dose, $\frac{1}{2}$ to 1 dram.

Trillium Pendulum.

(Bethroot.)

Bethroot is astringent, tonic and antiseptic. Tannin and bitter extractive are two of its active ingredients, to which its remedial effects are probably owing. Dr. Lee says of trillium. "It is one of our most valuable tonic-astringent alteratives, and especially beneficial in most cases of passive, atonic hemorrhage".

Successfully employed in hemoptysis, hematuria, menorrhagia, uterine hemorrhage, leucorrhea, cough, asthma, difficult breathing, and is said to have been used by the Indian women to promote parturition. An extract of equal parts of bethroot, and bugle has been highly recommended in diabetes.

Internal and external applications are found efficient in chronic mucous discharges. The root made into a poultice proves of service, to promote healthy action of indolent and ill-conditioned ulcers, and to check gangrene. See Journal of Materia Medica, vol. 1.

PREPARATIONS.

Fluid Extract,.....Dose, 1 to 3 drams.
Trillin,.....: " 4 to 8 grains.

Trifolium Pratense.

(Red Clover.)

The extract is highly recommended in cancerous ulcers of every kind, and deep, ragged-edged, and otherwise badly conditioned

burns. It possesses, to a great degree, soothing properties, and promotes healthy granulation.

PREPARATION.

Solid Extract,..... To be used at discretion.

Tussilago Farfara.

(*Coltsfoot*.)

Coltsfoot may be regarded as emollient, and demulcent, slightly tonic, and possessing, somewhat, expectorant properties.

The extract has been found useful in coughs, asthma, whooping-cough, and the pulmonary affections, acute and chronic.

It is pronounced, by many, serviceable in scrofula, in which complaint it is recommended by Cullen. The powder is used externally in the form of a poultice, to scrofulous sores.

PREPARATION.

Fluid Extract,.....Dose, $\frac{1}{2}$ to 1 dram.

Valeriana Officinalis.

(*Valerian*.)

Valerian is tonic in its action, anti-spasmodic, and calmative; subdues unusual and convulsive excitement of the system, without exerting narcotic effects. Wherever there is irregular nervous action, if unconnected with inflammation or excited condition of the system, valerian is useful in subduing it. It has been used in intermittent fever, in combination with cinchona; as also it is administered in the restlessness and irritability occurring in hysterical constitutions, in the morbid vigilance of fevers, in epilepsy hemicrania, hysteria, and hypochondriasis. In large doses, it produces a sense of heaviness, and dull pain in the head, with other effects indicating nervous disturbance.

The unpleasant taste of valerian is completely masqued by cinnamon. Dr. Copland says, this drug proves very efficient in the treatment of mania, melancholy &c., and especially so when these complaints are complicated with hysterical or hallucinatory affections. A combination of *valerian* with *acetate of ammonia* or *hyoscyamus* is mentioned by the same author as beneficial in the above cerebral derangements, particularly, after appropriate evacuations.

The *valerianate of iron* is a nervo-tonic, and will be found serviceable in nervous disorders, hysteria, chorea, neuralgia, chlorosis, and anæmic conditions with excitability or irritability of the nervous system. *Valerianate of quinia* is tonic, febrifuge, and

sedative, and may be employed similarly with the *tartrate of quinia* and *morphia*.

PREPARATIONS.

Fluid Extract,.....	Dose, $\frac{1}{4}$ to $1\frac{1}{2}$ drams.
Solid "	" 3 to 10 grains.
Pills, 2 grains,.....	" 2 to 5.

Veratrum Viride.

(*American Hellebore.*)

Emetic, alterative, expectorant, diaphoretic, nervine, and arterial sedative. The late Prof. TULLY, of New Haven, regarded it as an excellent substitute for colchicum, in gouty, neuralgic, and rheumatic affections, to which disease it is well adapted. It is said to increase most of the secretions. "The veratrum viride," says the Boston Medical and Surgical Journal, "is fast becoming a staple article of the materia medica, and its uses are every day more developed." It reduces the frequency and force of the pulse with more certainty than any other agent now in use. The fluid extract is regarded as the best form for administration. It has been more extensively employed in pneumonia than perhaps, any other disease. Said to be advantageous in pleurisy. In acute rheumatism, according to OSGOOD, it is more efficacious than any other remedy, if administered so as to sustain its impression, and at first without producing nausea. Dr. NORWOOD says: "We rely on veratrum as the remedy in typhoid fever, and administer it with every assurance of success." His plan is to reduce the pulse to between fifty-five and seventy-five beats a minute, and keep it at the point desired night and day. "By this kind of reduction the febrile and inflammatory symptoms vanish, and the patient is kept quiet, tranquil and comfortable." OSGOOD recommended this agent in nervous asthma, and not only in cases which are free from organic complication, but in some also in which emphysema and organic diseases of the heart coexist, as well as in those of nervous palpitation of this organ. A case of puerperal mania is reported by Dr. A. B. CLARK, in which the remissions and exacerbations of the disease clearly coincided with the administration and suspension of the hellebore. This agent is also reported to have been used with advantage for influenza, gout, femoral aneurism, dysentery, jaundice, and puerperal peritonitis.

Dr. COLEGROVE has published the result of his trials with veratrum in pneumonia, and the results are favorable to its employment. He says: "I regard it as a safe remedy in the hands of a careful physician." Dr. ENOS HOYT, of Farmingham, writes: "Have used the veratrum viride in the apoplexy of aged people and those of enfeebled health, and find it better than blood-letting, as the

recovery is better. Have given as high doses as twenty to forty drops in four cases that came under my care, which resulted in recovery, which was heroic treatment." He thinks he has derived much benefit from its use in scarlatina, and he learned while at the South that the physicians there were using it with good results in the same disease. "Where arterial excitement needs reducing it is decidedly better than *digitalis*. I like it in measles, pertussis, and parotidea."—(From American Medical Monthly.)

A committee, appointed to examine the claims of veratrum after great labor and research, and after comparing the experience of a number of physicians who had at their request, experimented with it say that veratrum viride is one of the best, (if not the best), arterial sedatives. It has been used by thousands of physicians fully competent to make observations with discrimination and sound judgment. The strongest and most conclusive testimony relative to its great value comes from those who have used it the most, and who are, therefore, the best prepared to express an opinion. Some of them feel as though they could not get along without it, especially in view of the fact that with it they have saved patients whom they think they must have lost without it. This committee came to the conclusion, that among all the cases that have been recorded throughout this whole country, not a single instance can be mentioned where serious harm has been wrought by its use. Of which of our other potent remedies can this be said? The committee add: "It matters little who now becomes skeptical in respect to the great value of veratrum as a medicinal agent. It has been used extensively and has vindicated the reputation given it, to the satisfaction and admiration of intelligent men all over the country, and supplied a want that nothing else has done."

The chief diseases in which it was employed by those reporting in answer to the request of the committee, were pleurisy, pneumonia, scarlet and remittent fevers, measles, asthma, convulsions, ovaritis, metritis, affections of the breasts, and, in fact, in most of the cases in which excessive heart action indicated a sedative relaxant. Did the medicine never fail, it would indeed, be a specific. But the experience of the whole medical world tells us that no specific has yet been discovered. The use of veratrum will show that it is as certain of producing its peculiar effects as calomel, or any other agent of the materia medica. D. L. MCGUGIN, M. D., (President Faculty Medical Department, Iowa University), remarks: "I am satisfied with the declaration that we possess no remedial agent so potent in the control of a certain class of morbid manifestations. In a certain class of diseases in which it is indicated, we can use it as an instrument by which we can take hold of the heart, as with our hands—restrain its action, and continue to keep

it under control." A. F. PATTEE, M. D., remarks: "The indications which veratrum viride seems to be capable of fulfilling are numerous. As a sedative, no other medicine is equal to it, reducing a pulse of one hundred and thirty beats to seventy in from three to four hours. The preparations most used at present are the fluid extract and tincture. I prefer the fluid extract, as prepared by Tilden & Co." See Journal of Materia Medica, vol. 1, 8, 4, and 5.

PREPARATIONS.

Fluid Extract,	Dose, 1 to 3 and 5 drops.
Solid "	" $\frac{1}{2}$ to $\frac{1}{2}$ grain.
Veratrin,	" $\frac{1}{16}$ to $\frac{1}{8}$ "

Verbena Hastata.

(Vervain.)

Tonic, emetic, expectorant, and sudorific. The extract made into a warm infusion proves beneficial in intermittents, all cases of colds and obstructed menstruation. The extract is recommended as a very good tonic in cases of debility, anorexia etc, pronounced valuable in scrofula, gravel and worms.

Is a soothing and palliative expectorant, it may be employed in catarrh, bronchial affections and pulmonary disorders.

PREPARATION.

Fluid Extract,	Dose, $\frac{1}{2}$ to 1 dram.
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Viburnum Opulus.

(Cramp-bark.)

Cramp-bark is a powerful anti-spasmodic, a perversion, among practitioners, of the name high-cranberry bark, in consequence of this property.

It is very efficacious in relaxing cramps and spasms, asthma, hysteria, cramps of females during pregnancy, highly beneficial in convulsions of pregnancy and parturition, and here it is said to be a prophylactic, if administered daily for the last two or three months of gestation. A poultice of this agent may prove eminently useful in indolent and malignant ulcers. Much benefit has been derived from a local application in inflammation and swelling of throat attending scarlatina maligna, and in other diseases.

PREPARATION.

Fluid Extract,	Dose, 1 to 2 drams.
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Xanthoxylum Fraxineum.

(Prickly Ash)

Stimulant, tonic, alterative, and sialogogue, producing when

swallowed, a sense of heat in the stomach, with more or less general arterial excitement, and a tendency to diaphoresis. It is thought to resemble *measeeon* and *guaiac* in its remedial action, and is given in the same complaints. It is used as a stimulant in languid states of the system, and as a sialogogue in paralysis of the tongue and mouth. It has proved highly beneficial in chronic rheumatism, colic, syphilis, hepatic derangements, and wherever a stimulant or alterative treatment is required. Combined with equal parts of *blue flag* and *mandrake*, it will be found useful in the treatment of scrofulous, syphilitic and other diseases, where there is a want of susceptibility to the influence of other alterative agents. The mixture must be given in small doses, and repeated at short intervals. Externally, it forms an excellent stimulating application to indolent and malignant ulcers. Prickly ash berries are stimulant, carminative, and anti-spasmodic, acting especially on mucous tissues. Combined with *phytolacca decandra*, in the form of tincture, they are said to be invaluable in chronic rheumatism; and tertiary syphilis. The tincture is useful in many nervous diseases, spasmodic affections of the bowels, flatulency, and in diarrhea. In tympanitic affections of the bowels during peritoneal inflammation, it is a safe and efficient remedy. It has been used successfully in Asiatic cholera. It is said to have a favorable effect upon the secretions of the kidneys. In small doses, it has proved highly beneficial in indigestion. It is thought to be unsafe for pregnant females by some, while others consider it useful, and contend that they are less liable to abortion if they use this agent. Some advocate its use in asthma, chronic affections of the bladder and uterus, in Bright's disease of kidneys, in chronic gout of the joints, scrofulous affections, neuralgia, hysteria, chorea, epilepsy, typhus and typhoid fevers, &c. It is said to have been used exclusively in place of *quinine* as a tonic, with good success.

In low forms of fevers, *xanthoxylum* has been found a very important and valuable stimulant tonic. *Xanthoxylum* may be used in all cases where it is desired to stimulate and strengthen mucous tissues. Where a stimulating tonic is required for children after diarrhea, dysentery, or other debilitating diseases, a combination of *hydrastin* with *xanthoxylum*, will admirably fulfill the indications. See Journal of Materia Medica, vol. 2, 3 and 6.

PREPARATIONS.

Fluid Extract,.....	Dose, 15 to 45 drops.
Xanthoxylum,	" 2 to 6 grains.
Fills of Xanthoxylum, 1 grain,.....	" 2 to 6.

Zingiber Officinale.

(Ginger.)

Ginger is, beyond question, the most valuable and grateful

stimulant, tonic, and carminative, we possess. Indeed, its value as a universally domestic medicine is too well known to need any remarks. We give briefly the circumstances in which it has been beneficially used.

During the oppressive heat of the summer months, when the system is prostrated or exhausted by fatigue, and requires a stimulant, no preparation can equal its efficacy. In the early stages of cholera, cholera morbus, diarrhea, and summer complaints, it may be regarded as almost a specific, in preventing the weakness and relaxation of the bowels which produce diarrhea.

"Prepared with rhubarb," says Dr. King, "few articles are more valuable in cholera morbus, and cholera infantum."

From loss of appetite, weakness of the digestive organs, nausea, distress of the stomach, cold, flatulent colic, and a predisposition to dyspepsia, a few drops will afford relief.

As a gargle for sore throat, as an external application for rheumatism, gout, ague in the face, &c.

"It is particularly valuable to travelers, who are exposed to complaints of the bowels, arising from change of climate and exposure, or from the use of unwholesome water."

It is much used to masque nauseous drugs, and to prevent their tendency to produce tormina; very important adjuvant to strong purgatives, moderating their violence. A local application of the concentrated tincture (one part of ginger and two of proof spirits), over the whole forehead has been attended with remarkable success in myopia.

PREPARATION.

Fluid Extract, Dose, $\frac{1}{4}$ to $1\frac{1}{4}$ drams.

PILULÆ.

Aconitine. One sixtieth part of a grain.

PROPERTIES.—The active principle of aconite, to which refer

Dose,—One.

Aconite. One fourth, one half, and one grain.

PROPERTIES.—Its action on the nervous system is that of a direct sedative. Valuable in neuropathic diseases, rheuma-

tism, gout, scrofula, secondary syphilis, certain cutaneous diseases, &c. See *Aconitum Napellus*, page 1.

Dose, ($\frac{1}{2}$ grain)—One to four.

Aloetic. *Pil. Aloes. U. S. P.*

Aloes, Socot.,
Soap, Castile, } equal parts. Four grains.

PROPERTIES.—Cathartic and tonic. Recommended in dyspepsia, amenorrhea, habitual constipation; ordinarily where cathartics are indicated. All the varieties of aloes operate very slowly but certainly, and have a peculiar affinity for the large intestines. Aloes has a decided tendency to the uterine system. It is useful in jaundice, in the treatment of ascarides, and is more frequently employed than any other remedy in amenorrhea. Aloes is contra-indicated by the existence of hemorrhoids, and is obviously unsuitable, unless modified by combination, to the treatment of inflammatory diseases.

In the *Aloetic* pill, the soap diminishes the liability of the aloes to irritate the rectum.

Dose,—One to three.

Aloes and Assafoetida. *Pil. Aloes et Assafoetida. U. S. P.*

Aloes,
Assafoetida, } equal parts. Four grains.
Soap, Cas., }

PROPERTIES.—Cathartic with stimulant and carminative properties. Applicable to costiveness attended with flatulence and debility of the digestive organs.

Dose,—Two to five.

Aloes and Iron. *Pil. Aloes et Ferri.*

Aloes Socot.,
Conium, Ext., $\text{ss } \frac{1}{2}$ part,
Iron, Sulphate,
Ginger, Jamaica, $\text{ss } 1$ part. } Three grains.

PROPERTIES.—The laxative power of aloes is increased, and its tendency to irritate is diminished by the combination with sulphate of iron. Useful in constipation with debility of the stomach, especially when attended with amenorrhea.

Dose,—One to four.

Aloes and Mastich.

PROPERTIES.—See *Dinner Pill, Lady Webster's*.

Dose,—One to three.

Aloes and Myrrh. *Pil. Aloes et Myrrha. U. S. P.*

Aloes Socot., 2 parts,
Myrrh,
Saffron, $\text{ss } 1$ part, } Four grains.

PROPERTIES.—Purgative and emmenagogue. Employed as a warm stimulant cathartic, in general debility attended with constipation, and retention or suppression of the menses. (Wood.)

Dose,—Three to five.

Aloes and Ext. Gentian.

PROPERTIES.—See *Gentian^a Compound*.

Dose,—One to five.

Ammonium, Bromide. One grain.

PROPERTIES.—Has especial reference to functional nervous diseases, particularly of the ganglionic system. This composition has been found decidedly beneficial in epilepsy, and strumous ophthalmia in the young. Dr. Gibb administered it successfully in these affections, in doses varying from one to ten grains, three times a day. Recommended in chorea, whooping-cough, and cases of diseased and irritated mucous membranes.

Dose,—Two to five.

Anderson's Scots'.

Aloes, Sect.,	} Two grains,
Soap,	
Colocynth,	
Oil Anise,	

PROPERTIES.—Antibilious and purgative. It is an excellent pill for promoting the biliary secretions, and uniting an alterative with its purgative action.

Dose,—One to three.

Anthemis. Two grains.

PROPERTIES.—Mild tonic. In small doses acceptable and corroborant to the stomach. See *Anthemis Nobilis*, page 3.

Dose,—One to six.

Antibilious.

Colocynth, Ext. 2½ grain,	} Two and three-fourths grains.
Podophyllin, ½ grain,	

PROPERTIES.—Drastic hydragogue cathartic. By this combination we have the purgative energy of colocynth without its violence. Recommended in dropsical affections, hepatic derangements, in cases where a brisk cathartic is indicated.

Dose,—One to four.

Antimonii Compound, U. S. P.

PROPERTIES.—See *Calomel Compound*.

Dose,—One to two.

Apocynum. Two grains.

PROPERTIES.—Promotes excretion. Has been beneficially

employed in liver and stomach affections, intermittents, and the low stage of typhoid fevers. See *Apocynum Androsaemifolium*, page 3.

Dose,—One to four.

Aperient.

Ext. Nux Vomica,	$\frac{1}{2}$ gr	} Two and five-sixths grains.
" Hyoscyamus,	$\frac{1}{2}$ "	
" Colocynth Comp.,	2 "	

PROPERTIES.—Promotes excretion. Employed in confirmed torpor of the bowels. Ext. hyoscyamus prevents tominia, without impairing the energy of the other ingredients.

Dose,—One to two.

Arsenious Acid. One thirty-secondnd part of a grain.

PROPERTIES.—Alterative and febrifuge. The principal diseases in which it is principally exhibited are, scirrhus and cancer, anomalous ulcers, intermittent fever, chronic rheumatism, particularly that form of it attended with pains in the bones, hemicrania and periodical headache.

The administration should at once be stopped, when it produces swelling of the face and eyelids, and disorder of the digestive organs.

Dose,—One to three.

Assafoetida. *Pil. Assafoetida.* U. S. P. Four grains.

PROPERTIES.—Powerful anti-spasmodic, moderate stimulant, efficient expectorant and feeble laxative. The disagreeable taste and odor are concealed by the sugar coating. It appears to exert a special action on the nervous system, but it acts also very powerfully on the digestive apparatus. Physicians have employed it against the various forms of hysteria. It has been employed in hypochondria, in asthma, and spasmodic bronchitis, in all the nervous maladies of the respiratory organs, in flatulent colic with constipation. It is also anthelmintic, and taken in small doses, it assists the functions of the stomach. It is highly useful in spasmodic pectoral affections, such as whooping cough, and asthma, and in certain infantile coughs and catarrhs, complicated with nervous disorder, or with a disposition of the system to sink.

Dose,—Two to four.

Assafoetida and Iron. *Pil. Assafoetida et Ferri.* U. S. P.

Assafoetida, 2 gra.	} Three grains.
Sulph. of Iron, 1 gr.	

PROPERTIES.—Has especial reference to spasmodic affections dependent on general debility of the system, and disorders attended with immoderate discharges.

Dose,—Two to four.

Assafoetida and Rhei.

Assafoetida,
Rhei,
Iron, by hydrogen, } equal parts. Three grains.

PROPERTIES.—Anti-spasmodic, tonic and laxative combination.

Dose,—Two to six.

Atropia. One sixtieth part of a grain.

PROPERTIES.—This alkaloid possesses the properties of atropa belladonna in a concentrated form. See page 10.

Dose,—One to two.

Belladonna. One-fourth, one-half, and one grain.

PROPERTIES.—Narcotic, possessing diaphoretic and diuretic properties, and somewhat disposed to act upon the bowels. Valuable in neuralgia, convulsions, spasms, and all painful conditions of the nervous system. Is used as a prophylactic in scarlatina. See Atropa Belladonna, page 10.

Dose, [$\frac{1}{2}$ grain]—One to four.

Bismuth, Subnitrate. Two grains.

PROPERTIES.—Anti-spasmodic, absorbent, and slightly sedative and astringent. Principally employed in painful affections of the stomach, such as cardialgia, pyrosis and gastrodynia; in spasmodic diseases; and in dysentery and diarrhea.

Dose,—Two to four.

Bismuth, Subcarbonate. Three grains.

PROPERTIES.—Tonic and sedative. Recommended in the treatment of gastralgia, attended with acrid tongue, laborious digestion, acid eructations and spasmodic vomiting. Has the advantage over the nitrate in that it is more readily tolerated by the stomach, more susceptible of being dissolved in the gastric juice, more potent to neutralize the excess of acid in the stomach, and produces no constipating effects.

Dose,—One to three just before meals.

Blue Pill. *Pil. Hydrargyri.* U. S. P. Two and one-half, and five grains

PROPERTIES.—Alterative, sialogogue and purgative. Less irritating than the other mercurials. It is employed in constipation, biliary derangements, syphilitic diseases, and whenever the influence of mercury is desirable. With a view to the alterative effect upon the digestive organs one pill may be given every night, or every other night, at bed-time, and followed in the morning, if the bowels should not be opened, by a small dose of laxative medicine. From five to fifteen grains of the mass are occasionally given as a cathartic, in cases requiring a peculiar impression upon the liver; but,

when used for this purpose, it should always either be combined with, or speedily followed by, a more certain purgative.

Dose., $\left\{ \begin{array}{l} 2\frac{1}{2} \text{ gra. Two to four.} \\ 5 \text{ " One to two.} \end{array} \right.$

Blue Pill Compound.

Blue Pill, 1 gr. }
Opil, $\frac{1}{2}$ gr. } One and three-quarter grains.
Ipecac, $\frac{1}{2}$ gr. }

PROPERTIES. — This combination so modifies the action of blue pill, as to render it a more satisfactory laxative and alterative. The base is more energetic, while its after-effects are less objectionable.

Dose, — One to three.

Blue Pill and Podophyllin. Three grains.

PROPERTIES. — See *Podophyllin and Blue Pill*.

Dose, — One to two.

Calomel. One-half, one, two, three, and five grains.

PROPERTIES. — Calomel is the most valuable of the mercurial preparations, uniting with the general properties of the mercurials those of a purgative and anthelmintic. Whether the object be to bring the system under the general influence of mercury, or to produce its alterative action upon the hepatic or other secretory functions, calomel is superior to all other preparations, on account of both its certainty and mildness.

It is peculiarly useful in the commencement of bilious fevers, in hepatitis, jaundice, bilious and painter's colic, dysentery, especially that of the tropical climates, and all other affections attended with congestion of the portal system, or torpidity of the hepatic function. It is often added in small quantities to purgative combinations, with a view to its influence on the liver.

Calomel Compound. (*Plummer's*) *Pil. Calomelanos Composita. U. S. P.*

Three grains.

PROPERTIES. — Alterative, well adapted to the treatment of chronic rheumatism, and of scaly and other eruptive diseases of the skin, especially when accompanied with a syphilitic taint.

Dose, — One to two.

Calomel and Opium.

Calomel, 2 grs. }
Opium, 1 " } Three grains.

PROPERTIES.—The degree of irritation which ordinarily follows the administration of pure calomel is diminished, while its laxative power is increased by this combination.

Dose,—One to three.

Calomel and Rhei, Ext.

Calomel, $\frac{1}{2}$ gr.	} One and a half grains.
Ext., Rhei, $\frac{1}{2}$ gr.	
" Colocynth, Comp., $\frac{1}{2}$ gr.	
" Hyoscyamus, $\frac{1}{2}$ gr.	

PROPERTIES.—A safe and reliable pill in habitual constipation. Its use is unattended by any unpleasant results.

Dose,—Two to four.

Calomel and Compound Colocynth, Ext.

Calomel, 1 gr.	} Three and a half grains.
Ext. Colocynth Comp., $2\frac{1}{2}$ gra.	

PROPERTIES.—Employed in costiveness and torpid state of the bowels and liver. Possesses properties similar to colocynth comp. and blue pill.

Dose,—Two to four.

Camphor and Opium.

Camphor, 2 gra.	} Three grains.
Opium, 1 "	

PROPERTIES.—Anodyne, diaphoretic, sedative and antispasmodic. Camphor is said to lessen the chance of idiosyncratic effects of opium. This combination is serviceable in hysteria, nymphomania and all irritation of the sexual organs.

Dose,—One to two.

Cannabis Indica. One-half, and one grain.

PROPERTIES.—Supposed to exert an influence on both the brain and spinal cord. It is very efficient in checking cough and cramp, and removing langour and anxiety. See Cannabis Indica, page 16.

Dose, ($\frac{1}{2}$ grain),—One to four.

Capsicum. One grain.

PROPERTIES.—In small doses it produces warmth in the stomach, promotes digestion, and stimulates the genito-urinary organs. See Capsicum Annuum, page 17.

Dose,—One to two.

Cathartic. *Pil. Cathartica Composita.* U. S. P.

Ext. Colocynth, Comp.,	} Three grains.
" Jalap,	
Calomel,	
Gamboge,	

PROPERTIES.—This preparation is intended to represent numerous cathartics, and calculated for a wide range of application. The operation of the several ingredients, though singly drastic, is rendered mild in a state of combination, without losing any of its purgative power. Particularly adapted to the early stages of bilious fevers, to hepatitis, jaundice, and all those derangements of the alimentary canal, or of the general health, which depend on congestion of the portal circle

Dose.—One to Four.

Cathartic Improved.

Ext. Colocynth, Comp.,	} Three grains.
“ Jalap,	
Podophyllin,	
Leptandrin,	
Ext. Hyoscyamus,	
“ Gentian,	
Oil Peppermint.	

PROPERTIES.—Formula first appeared in the Journal of *Materia Medica*. The *Improved Compound Cathartic* is a reliable purgative, mild and speedy in its operation, possesses superior alterative properties, regulates the biliary secretions, and thoroughly cleanses the alimentary canal.

The numerous testimonials received in reference to the action of this pill agree in saying, that while it is not violently drastic, it is thorough in its action, not weakening the system by hasty and drenching discharges, but acting as a superior alternative; at the same time being certain and effective in its action on the liver. This has everywhere been the testimony in reference to the action of podophyllin and leptandrin, namely, certainty in their cholagogue, purgative, and alterative action, unaccompanied by haste or violence.

Possesses the purgative, alterative and cholagogue properties of the U. S. P. Compound Cathartic, at the same time not being open to the popular objection of including calomel in its composition; and as a substitute for the U. S. P. pill, it is confidently recommended to the profession.

Dose.—One to Three.

Chimaphila, Ext. Three grains.

PROPERTIES.—It has proved very efficacious in many cutaneous diseases, scrofula, chronic rheumatism, chronic nephritic, urinary and dropsical affections. See *Chimaphila Umbellata*, page 22.

Dose.—Three to six.

Chinoidine. Two grains.

Chinoidine resembles quinia in its medical properties, occasionally effective, where the salts of quinia, from long use, have become powerless. Some even claim for it a superiority over all other preparations of cinchona.

Dose—One to Three.

Chinoidine Compound.

Chinoidine, 2 grs.,	} Three and a half grains.
Ferri Sulphate, Exsic., 1 gr.	
Piperini, $\frac{1}{2}$ gr.	

PROPERTIES.—This union of well-known tonics will be found useful in chlorosis, and in anæmic conditions, in some types of amenorrhea; and generally where the system lacks vital energy, and the blood is impoverished.

Dose —One to Two.

Cimicifugin. One grain.

PROPERTIES. — “Tonic, alterative, nervine, anti-periodic, with an especial affinity for the uterus. Used in intermittent fevers, periodic disorders, leucorrhea, menorrhagia, dysmenorrhea, amenorrhea, sterility, rheumatism, scrofula, and prolapsus uteri, not accompanied by an inflammatory condition of that organ or its ligaments. It has also been used with success in gleet, gonorrhea and dyspepsia.” See *Cimicifuga Racemosa*, page 24.

Dose—One to Four.

Cinchonia, Sulphate. One and a half, and three grains.

PROPERTIES.—Possesses nearly the same remedial virtues as sulphate of quinia. Efficient as a tonic and anti-periodic.

Dose.—($1\frac{1}{2}$ grain) One to Four.

Cochia.

Colocynth Comp.,	} Three grains.
Aloes,	
Gamboge,	
Scammony,	
Potassa Sulph.	

PROPERTIES.—Actively cathartic. Sulphate potassa establishes a more perfect division of the aloes and scammony.

Dose.—One to Three.

Codeia. One sixteenth part of a grain.

PROPERTIES.—In the hands of M. Barbier, of Amiens, it relieved painful affections having their origin in the great sympathetic. It neither affected the circulation, disturbed digestion, or produced constipation. Dr. Aran, of Paris, deems

it not inferior to morphia, in its efficiency to relieve pain and secure undisturbed rest, though it must be given in larger doses. As respects intensity of action, Magendie compares one grain of codeia with half a grain of morphia. Two grains induced, besides sleep, vertigo, nausea, and even vomiting; but this dose succeeded like a charm in cases of neuralgia faciei, and in sciatica, that had resisted the most valued agents. Dr. Miranda has published the results of his experience with codeia in what he calls powerful nervous irritations of the mucous membranes of the stomach, and he affirms that by it he cured eleven cases. It has been used with great advantage in several bad cases of dyspepsia.

Dose.—One to Four.

Colchicum, Ext. One half grain.

PROPERTIES.—Sedative, and appears to have the power of increasing all the secretions. Colchicum is considered invaluable in the treatment of gout and rheumatism, especially when these affections assume a neuralgic character. See Colchicum Autumnale, page 27.

Dose.—One to Three.

Colocynth Compound, Ext. Three grains.

PROPERTIES.—Produces prompt and free alvine evacuations. Exhibited beneficially in hepatic derangements.

Dose.—Two to Six.

Colocynth Compound, Ext., and Blue Pill.

Colocynth Comp., $2\frac{1}{2}$ grs., }
Blue Pill, $\frac{1}{2}$ gr. } Three grains.

PROPERTIES.—An excellent alterative and cholagogue combination.

Dose.—One to Two.

Colocynth Compound Ext. and Ipecac. Three grains.

PROPERTIES.—The modification produced by a union with ipecac renders the action of colocynth compound more energetic, and also less severe. A favorite pill with many to remove visceral obstructions.

Dose.—Two to Four.

Colocynth Compound Ext. and Hyoscyamus. *Pil. Colocynthis*

et Hyoscyami, U. S. P. Three grains.

PROPERTIES.—Compound extract of colocynth is said to be almost entirely deprived of its griping tendency by com-

binning it with hyoscyamus, without suffering any impairment of its purgative power.

Dose.—One to Six.

Colocynth Compound Ext. and Podophyllin. Three grains.

PROPERTIES.—Antibilious cathartic. A potent substitute for calomel where some idiosyncrasy of constitution or prejudice interdicts the use of the latter agent.

Dose.—One to Two.

Colocynth Compound Ext. and Calomel. Three grains.

PROPERTIES.—Possesses properties analogous to Colocynth Compound and Blue Pill.

Dose.—Two to Three.

Conium, Ext. One-fourth, one-half, and one grain.

PROPERTIES.—Narcotic and alterative. Conium is administered in a variety of complaints to alleviate pain. By some it is supposed to possess a curative influence over malignant tumors. Beneficial in chronic rheumatic affections; in all excitable conditions of the nervous and vascular system. See Conium Maculatum, page 29.

Dose.—($\frac{1}{4}$ grain) Two to Six.

Conium and Ipecac. *U. S. P.* One grain.

PROPERTIES.—Conium is regarded by some physicians, more serviceable when united with ipecac.

Dose.—Three to Five.

Cook's Pill.

Aloes, 1 gr.,	} Three grains.
Calomel, $\frac{1}{4}$ gr.,	
Rhei, 1 gr.,	
Soap, $\frac{1}{4}$ gr.	

PROPERTIES.—Laxative and alterative. A very popular pill on the plantations through the South.

Dose.—One to Three.

Copaiba, Pure, Solidified. Three and four grains.

PROPERTIES.—Diuretic. Efficient in chronic diseases of the mucous membranes. It operates by exciting a new and healthy action on irritated mucous surfaces. In small doses it improves the digestion, and in larger doses it occasions nausea and alvine dejections. It has an especial action on the genito-urinal membranes. Hence proceeds its principal use in combating the hemorrhagic fluxes, and it is, with cubeba,

the specific for these diseases. It is administered both at the outset as well as when the inflammatory symptoms have subsided. Copaiba prevents nocturnal erections, the pain and inflammation in gonorrhea, as well as, and often better than antiphlogistics. M. Ribes asserts that copaiba has never failed against the symptoms provoked by the spontaneous suppression of the gonorrhea, particularly when the symptoms were developed a little time after the suppression of the discharge, and when the remedy was instantly employed; in such cases the gonorrhea and the symptoms have invariably never returned.

Dose.—(3 grains.) Two to Five.

Copaiba Compound.

Pil. Copaiba,
Resin Guaiac,
Ferri Cit.,
Oleo-resin, Cubeb. }

PROPERTIES.—Unites a gentle but efficient chalybeate with powerful diuretics. This pill is preferred by many to any other in the treatment of gleet, gonorrhea, and that class of diseases.

Dose.—One to Three.

Copaiba and Cubebs, Ext.

Pil. Copaiba, 2 gra.,
Oleo-resin, Cubeb, 1 grain. } Three grains.

PROPERTIES.—Produces effects similar with copaiba pure, and given in the same type of disorders.

Dose.—Two to Four.

Copaiba, Ext. Cubebs and Citrate Iron. Three grains.

PROPERTIES.—Similar to copaiba compound.

Dose.—One to Four.

Cornin. Two grains.

PROPERTIES.—It may be used in all cases where quinine is indicated. The active principle of *Cornus Florida*.

Dose.—One to Five.

Cornus Florida, Ext. Two grains.

PROPERTIES.—Tonic, astringent and highly stimulant. Used with advantage in typhoid, and periodical fevers, in all cases where tonics are advised. See *Cornus Florida*, page 31.

Dose.—Two to Five.

Corrosive Sublimate. One-sixteenth, and one-eighth part of a grain.

PROPERTIES.—Alterative in cutaneous, scrofulous and rheumatic diseases, nervous disorders, diseases of the bones, &c., obstinate prurigo, acne, and other eruptions of the face. Generally employed in syphilitic maladies.

Dose.—($\frac{1}{16}$ grain) One to Two.

Cubebs Ext. Two grains.

PROPERTIES.—Cubebs are stimulant, exercising a decided influence over the urinary apparatus. Have been successfully administered in gonorrhea, leucorrhea, and also been found of service in chronic bronchitis, laryngitis, and dyspepsia. See Piper Cubeba, page 72.

Dose.—One to Six.

Cubebs and Alum. Three grains.

PROPERTIES.—Alum is stated greatly to increase the efficacy of cubebs. (Waring.)

Dose.—Two to Four.

Cubebs, Ext., Rhatany and Iron.

Ext. Cubebs,	$1\frac{1}{2}$ grs.	} Three grains.
" Rhatany	$\frac{1}{2}$ "	
Iron, Sulphate	1 "	

PROPERTIES.—Stimulant, astringent and tonic. This combination appears to be indicated in mucous discharges, incontinence of urine, &c. The type of fluxes will readily be suggested to which this combination is peculiarly adapted.

Dose.—One to Three.

Cypripedium, Ext. Two grains.

PROPERTIES.—Useful in hysteria, chorea, nervous headache, and all cases of nervous irritability. See Cypripedium page 33.

Dose.—Two to Six.

Digitalin. One-sixtieth part of a grain.

PROPERTIES.—The amorphous principle of Digitalis Purpurea, and effects the system similarly. Exercises a powerful sedative influence on the circulatory and nervous systems, and particularly on the generative organs. The potency of this concentrated principle necessitates care and prudence in the administration.

Dose.—One to Two.

Digitalis, Ext. One-half grain.

PROPERTIES.—Sedative and diuretic. The former adapts

it to cases in which the action of the heart requires it to be controlled, the latter renders it invaluable in dropsical affections. The two actions never occur simultaneously. If either of these effects be kindly obtained, there is no danger of its accumulating in the system. Employed in dropsy, diseases of the heart, aneurism, epilepsy, &c. See *Digitalis Purpurea*, page 36.

Dose.—One to Three.

Dinner Pill. (*Lady Webster's.*)

Aloes, Socot.,	} Three grains.
Gum Mastich,	
Rose Leaves,	

PROPERTIES.—A favorite pill in indigestion, dyspepsia, and constipation.

Dose.—One to Three.

Dover's Powders. Two and one-half grains.

PROPERTIES.—Sedative and diaphoretic. See *Ipecac* and *Opium*, page 121.

Dose.—One to Six.

Elaterium. (*Clutterbuck's.*) One-eighth grain.

PROPERTIES.—Elaterium is a drastic purgative. Its nauseating and griping tendency is counteracted by a combination with capsicum or ginger. Applicable in cases requiring very copious evacuations, as in the treatment of passive dropsies, especially in ascites and hydrothorax, as a revulsive in cerebral affections, and whenever a hydragogue or revellent effect is indicated.

Dose.—One to Two.

Gamboge Compound. *Pil. Gambogiae Composita*, U. S. P. Three grains.

Gamboge,	} Three grains.
Aloes, Socot.,	
Ginger, Jamaica,	
Soap,	

PROPERTIES.—An active purgative pill.

Dose.—Three to Five.

Gentian, Ext. Two grains.

PROPERTIES.—Tonic. Promotes the appetite, invigorates digestion, and acts as a general corroborant. See *Gentiana Lutea*, page 43.

Dose.—Two to Six.

Gentian Compound. *Pil. Gentiana Composita*, U. S. P.

Ext. Gentian,	} Four grains.
Aloes Socot.,	
Rhei Powder	
Oil Carui,	

PROPERTIES.—A laxative to the constipations of sedentary and dyspeptic persons.

Dose.—One to Five.

Geraniin. One grain.

PROPERTIES.—May be employed for all purposes to which astringent pilular medicines are applicable. See *Geranium Maculatum*, page 44.

Dose.—One to Five.

Hellebore, Black, Ext. One grain.

PROPERTIES.—Hellebore, in medicinal doses, is alterative, drastic cathartic, emmenagogue and anthelmintic. See *Helleborus Niger*, page 48.

Dose.—One to Five.

Hooper's Female Pills.

Aloes, Socot,
Iron, Sulphate,
Ext. Black Hellebore,
Myrrh
Soap,
Canela,
Ginger, Jamaica,

} Two and a half grains.

PROPERTIES.—Extensively used for their emmenagogue properties.

Dose.—One to Three.

Hydrastin, Alkaloid. One grain.

PROPERTIES.—Laxative, cholagogue, alterative, resolvent, tonic, diuretic and antiseptic, with an especial action on diseased mucous tissues. It acts upon the liver with a certainty and efficacy that few drugs possess. As a cholagogue and deobstruent, it is said to have few equals. In splenic, mesenteric, and abdominal visceral affections generally, in scrofula, glandular and cutaneous diseases, debility, chronic diarrhea and dysentery, constipation, and in all morbid discharges; it is a remedy whose utility is attested by the highest authority. See *Hydrastis Canadensis*, page 51.

Dose.—One to Five.

Hydrastin, Resinoid. One grain.

PROPERTIES.—This resinoid principle has properties similar to those of the preceding alkaloid, but is too stimulating in certain irritable and inflamed states of the mucous membranes. When torpor and coldness of the system occur, and when there are exudations of plastic lymph, the influence of

this medicine appears to be imperatively demanded. It should not be employed in cases of inflamed mucous linings of the bowels, as it is then liable to be attended with tenesmic and colicky pains, and other troublesome conditions.

Dose.—Two to Six.

Hyoscyamus, Ext. One-fourth, one-half, and one grain.

PROPERTIES.—Narcotic, anodyne and anti-spasmodic. Calms and soothes any irritation of the system, allays pain and relieves spasms. Its use is unattended by the unpleasant after effects which usually accompany the administration of opium,

Dose.—($\frac{1}{2}$ grain) Two to Four.

Ignatia, Ext. One-half, and one grain.

PROPERTIES.—Very similar to nux vomica, but more energetic. Useful in nervous debility, amenorrhœa, chlorosis, and epilepsy. See Ignatia Amara, page 94.

Dose.—($\frac{1}{2}$ grain) One to Three.

Iodine. One-eighth grain.

PROPERTIES.—Principally employed in diseases of the absorbent and glandular systems, all diseases of an hypertrophical, strumous or cachectic character.

Dose.—One to Four.

Iodoform and Iron.

Iron, by Hydrogen, 1 gr. }
Iodoform, 1 gr. } Two grains.

PROPERTIES.—Possesses tonic, anti-septic and anti-spasmodic virtues, serviceable to arrest the progress of phthisis, highly recommended as an alterative in the treatment of obstinate skin diseases, scrofulous enlargement of the glands, and old cases of bronchocele.

Dose.—One to Three.

Ipecac, Ext. One-fourth grain.

PROPERTIES.—Ipecac, in one-fourth grain doses, acts as a tonic, invigorating digestion, promoting the appetite, and is useful in some forms of dyspepsia. Half grain doses, administered every three or four hours, produce perspiration, and are beneficial in febrile and inflammatory diseases. See Cephælis Ipecacuanha, page 20.

Dose.—One to Three.

Ipecac and Opium. (Dover's Powder.)

Opium, 1 part,
Ipecac, 1 " }
Potass. Sulphate, 8 parts. } 2½ grains

PROPERTIES.—An admirable anodyne diaphoretic, not surpassed perhaps by any other combination in the power of promoting perspiration

Dose.—One to Six.

Ipecac and Opium.

Opium, $\frac{1}{2}$ gr.

Ipecac, $\frac{1}{2}$ gr.

Potass. Sulph., 1 gr.

} Two grains, equal to five grains Dover's Powders.

Ipecac and Opium.

Opium, 1 gr.

Ipecac, 1 gr.

Potass. Sulph., 2 grs.

} Four grains, equal to Ten grains Dover's Powder.

Ipecac and Squills. *Pil. Ipecacuanæ et Scilla, U. S. P.* Three grains.

PROPERTIES.—A mild expectorant medicine for children when threatened with an attack of croup; and beneficial in catarrh, bronchia, and that class of complaints, when a gentle expectorant stimulant is required.

Dose.—Two to Three.

Irisin. One-half, and one grain.

PROPERTIES.—The oleo-resinous principle of blue flag, cathartic, alterative, sialagogue, diuretic and vermifuge. See *Iris Versicolor*, page 55.

Dose.—($\frac{1}{2}$ grain) One to Six.

Iron and Aloes.

PROPERTIES.—See *Aloes and Iron*.

Dose.—One to Four.

Iron, Citrate. Two grains.

PROPERTIES.—Highly esteemed ferruginous preparation. Suitable for children in ordinary cases of debility.

Dose.—Two to Three.

Iron, Citrate, and Quinine, Citrate. One, and two grains.

PROPERTIES.—Valuable tonic. A convenient form for administering quinine and iron in combination. Admirably adapted for children and delicate females.

Dose.—(1 grain.)—Two to Six.

Iron, Citrate, and Strychnia, Citrate.

Strychnia, Cit., $\frac{1}{16}$ part, {
Iron Cit., 2 grs. }

PROPERTIES.—Chalybeate and tonic. May be given in dyspepsia when there is want of appetite, and constipation, in paralysis, amenorrhea, &c.

Dose.—One to Two.

Iron, Compound. *Pol. Ferri Composita. U. S. P.*

Myrrh,
Soda Carb., } Three grains.
Iron, Sulph., }

PROPERTIES.—This pill is used principally as an emmenagogue, and antihectic tonic.

Dose.—Two to Six.

Iron, Carbonate (*Vallet's Formula.*) Three grains.

PROPERTIES.—Particularly useful in chlorosis, ammenorrhea, and other female complaints. Vallet's preparation is the best to produce the alterative effects of iron.

Dose.—Three to Five.

Iron, Carbonate of, and Manganese. Three grains.

PROPERTIES.—Tonic and alterative. It is asserted that cases of anæmia, which had resisted the administration of iron alone, yielded rapidly to the combination of this metal with manganese. "In confirmation of this statement," says Speer, "I may say that in two cases which lately came under my notice, the one of chlorotic anemia, with amenorrhea, the other of uncomplicated traumatic anemia, both of long standing, the saccharine carbonate of iron and manganese succeeded entirely, after iron alone had failed. In each of these cases, its effects upon the composition of the blood and through this upon the general health, were extremely rapid, thus affording a contrast to the effects of the simple preparations of iron, which, even when most successful, are usually slow in their operation."

Dose.—One to Three.

Iron, Hydrocyanate. One-half grain.

PROPERTIES.—Valuable in epilepsy, neuralgia, and nervous affections generally. These pills have been known to effect permanent cures of epileptic paroxysms after a total failure of other remedies usually prescribed. The utility of hydrocyanate of iron in epileptic spasms, and the consequent despondency and gloomy feelings, is strongly supported by Dr. McGugin, Professor in the Iowa Medical College.

Dose, to prevent the return of epileptic spasms, 1 night and morning; for neuralgic and nervous affections, 1 every three hours, increasing according to the indications.

Dose.—One to Two.

Iron, Iodide of. (1 grain.) (*Unalterable.*)

These pills are unalterable, rendered constant in their composition by the thick coating which surrounds the iodine, are

without the taste of iron or iodine, of convenient size, and have the peculiar property of being dissolved in the gastric juices gradually, and being taken up by the absorbents as it were molecule by molecule without irritating or fatiguing the system.

The long recognized difficulty of husbanding the iodine and presenting it in an acceptable form has been overcome.

In the hospitals of Paris, these pills have achieved wonderful results in the treatment of chlorosis, scrofula, glandular enlargements, leucorrhœa, suppression of the menses, difficult menstruation, constitutional syphilis, cancer, goitre, rachitis, and tubercular affections.

Dose.—One to Two.

Iron and Iodoform. Two grains.

PROPERTIES.—*See Iodoform and Iron.*

Dose.—One to Three.

Iron, Lactate. One grain.

PROPERTIES.—Possesses the general medical properties of the ferruginous preparations. Has a marked effect in increasing the appetite. Efficacious in chlorosis, with or without amenorrhœa.

Dose.—One to Two.

Iron, Phosphate. Two grains.

PROPERTIES.—Advised in cancerous affections. Potent to invigorate and restore the vital powers. Beneficial in febrile diseases, rickets, diabetes and anæmic diseases.

Dose.—Two to Four.

Iron, Pyro-Phosphate. One grain.

PROPERTIES.—Blood restorative, tonic and alterative. Superior medicinal virtues are claimed for it.

Dose.—Two to Five.

Iron, Protiodide. One grain.

PROPERTIES.—Tonic, alterative, diuretic and emmenagogue. Sharpens the appetite, promotes digestion, and occasionally proves laxative. Chiefly employed in scrofulous affections, swellings of the cervical glands, visceral obstructions attended with deficient action, chlorosis, atonic amenorrhœa, and leucorrhœa.

Dose.—Two to Four.

Iron, Quevenne's. (*By Hydrogen.*) One, and two grains.

PROPERTIES.—Employed in anæmia, chlorosis, amenorr-

hea, chorea, and enlargement of the spleen following intermittent fever. Its general mode of action is to improve the quality of impoverished blood.

Dose.—(1 grain.) Three to Six.

Iron and Strychnia.

Strychnia, $\frac{1}{2}$ gr.

Iron, by Hydrogen. 2 gra. } Two and one-sixtieth grains.

PROPERTIES.—Beneficial in dyspepsia, when there is want of appetite, constipation, and a sensation of weight in the epigastrium after eating. Strychnia appears to overcome constipation by its peristaltic action on the portal circle, while iron gives tone to the system.

Dose.—One to Two.

Iron, Sulphate, Exsic. *℞ Ferri Sulphatis. U. S. P.* Four grains.

PROPERTIES.—As an astringent in diseases attended with immoderate discharges, such as passive hemorrhages, diabetes, leucorrhœa, gleet; as a tonic in dyspepsia, and in the debility following protracted diseases.

Dose.—One to Five.

Iron, Valerianate. One grain.

PROPERTIES.—Tonic, anti-spasmodic. The valerianate of iron proves an efficacious remedy in hysterical affections, and is particularly valuable when these disorders are accompanied with chlorosis.

Dose.—One to Two.

Jalap. One grain.

PROPERTIES.—Jalap in small doses is aperient and laxative, in large doses an active but safe and convenient purgative. See Jalapa Ipomœa, page 53.

Dose.—One to Six.

Jalapin. One grain.

PROPERTIES.—The active principle of Jalap, to which refer.

Dose.—One to Two.

Kermes. One-fourth grain.

PROPERTIES.—Recommended as an invaluable medicine in childbed fevers, to promote diaphoresis, and to reduce the force of the circulation.

Dose.—Two to Four.

Krameria, Ext. (*Rhatany*.) Two grains.

PROPERTIES.—One of the most active vegetable astringents. Used in diarrheas, dysentery and passive hemorrhages.

Dose.—One to Five

Lactuca, Ext. Two grains.

PROPERTIES.—Quiets nervous irritation, produces sleep and allays cough. See *Lactuca Sativa*, page 58.

Dose.—One to Three.

Leptandrin. One grain.

PROPERTIES.—“The effect of leptandrin is gently to excite the liver without producing the least irritation of the bowels. It does not purge at all, and even its laxative effect is very slight, while on the stomach it acts as a decided tonic, hence it is most valuable in *diarrhea* and *chronic dysentery*, when the stools are destitute of bile, and the mucous membrane is irritable. In *torpidity* of the liver it is thought to be superior to Blue Pill.”—*Waring*. See *Leptandra Virginica*, page 60.

Dose.—One to Two.

Leptandrin Compound.

Leptandrin,	$\frac{1}{2}$ gr.	} One and three-eighth grains.
Irisin,	$\frac{1}{4}$ gr.	
Podophyllin,	$\frac{1}{8}$ gr.	

PROPERTIES.—Has been exhibited with good effects in liver affections, obstinate constipation, or when an active impression is demanded. Will be found useful in dysentery, rheumatism, chronic visceral obstructions, glandular diseases, &c.

Dose.—One to Four.

Lupulin. Three grains.

PROPERTIES.—Lupulin is regarded as possessing no inconsiderable power to control delirium tremens and watchfulness in connection with nervous irritation, anxiety and exhaustion. See *Humulus Lupulus*, page 49.

Dose.—Two to Three.

Magnesia, Calcined. Two grains.

PROPERTIES.—Antacid and laxative; much used in dyspepsia, sick headache, gout and other complaints attended with sour stomach and constipation.

Dose.—Two to Five.

Magnesia and Rhei.

Magnesia, 1 grain, }
 Rhubarb, 1 grain. } Two grains.

PROPERTIES.—An excellent combination in constipation and dyspepsia.

Dose.—One to Two.

Mercury, Protoiodide. One-fourth grain.

PROPERTIES.—Has been given with eminent success in scrofula and syphilis, especially when they occur conjoined, and is regarded a superior remedy in these affections. It should never be given in conjunction with iodide of potassium. Dr. Schedel remarks, "Of its good effects, too much can not be said."

Dose.—One to Two.

Mercury, Red. Iodide. One-sixteenth grain.

PROPERTIES.—Employed in similar diseases with the protoiodide, in scrofula and scrofulous syphilis, but is much more active. Dr. Fuller of London, attests its utility in rheumatism dependent on a syphilitic taint;—in epilepsy brought on by injuries to the head.

Dose.—One to Four.

Mercury, Iodide, and Opii.

Iodide, 1 grain }
 Opii, $\frac{1}{4}$ grain. } One and one-third grain.

PROPERTIES.—Alterative and stimulant. The advantage of conjoining opiates with mercury is to counteract the tendency of the last named agent to irritate the mucous membranes of the stomach and bowels in irritable subjects.

Dose.—One to Three.

Morphia, Acetate. One-eighth grain.

PROPERTIES.—Anodyne and soporific. Exerts similar effects upon the system as the other salts of morphia, and some practitioners give it the preference. Morphia itself is the chief if not the exclusive narcotic principle of opium, from which, however, it differs somewhat in its mode of action.

Dose.—One to Two.

Morphia, Sulphate. One thirty-second and one-eighth grain.

PROPERTIES.—The sulphate of morphia is applicable to all cases when the object is to relieve pain, quiet restlessness, promote sleep, or allay nervous irritation in any shape. It has the anodyne, soporific and diaphoretic properties of opi-

um, but is less stimulant, less disposed to constipate the bowels, and less apt to leave behind headache, nausea or other unpleasant effects.

Dose.—($\frac{1}{2}$ grain) Two to Four.

Morphia, Valerianate. One thirty-second, and one-eighth grains.

PROPERTIES.—Morphia neutralized with Valerianic acid. This salt is used to some extent in nervous diseases, restlessness, in fevers, &c.

Dose.—($\frac{1}{2}$ grain) Two to Four.

Morphia Compound.

Morphia, Sulphate, $\frac{1}{2}$ gr.	} Three-fourths of a grain.
Tart. Pot. and Ant., $\frac{1}{2}$ gr.	
Calomel, $\frac{1}{2}$ gr.	

PROPERTIES.—Tonic, diaphoretic and alterative. Employed in febrile diseases, especially of the thoracic organs.

Dose.—Two to Four.

Nitrate of Silver. One-fourth grain.

PROPERTIES.—Tonic, anti-spasmodic and sedative. Employed in epilepsy, chorea, angina pectoris, and other spasmodic affections. It has the reputation of exerting a beneficial influence inferior to no other remedy in gastralgia, pyrosis, chronic gastritis and diarrhea of phthisis. It possesses a wide range of application.

Dose.—One to Two.

Nux Vomica, Ext. One-eighth, and one-half grain.

PROPERTIES.—Increases the action of the various excreting organs. Principally used when there is want of nervous energy, in the treatment of paraplegia, local palsies, or of the bladder, amurosis, spermatorrhea, &c.

Dose.—($\frac{1}{2}$ grain) One to Two.

Opium. One grain.

PROPERTIES.—Narcotic and stimulant, and acts under different circumstances as a diaphoretic, febrifuge and anti-spasmodic.

Dose.—One to Four.

Opium and Acetate Lead.

Opium, 1 gr.,	} Two grains.
Acetate of Lead, 1 gr.	

PROPERTIES.—Advantageous in hemorrhages, attended with great constitutional excitement.

Dose.—One to Three.

Opium and Camphor.

Opium, 1 gr.,
Camphor, 2 gra. } Three grains.

PROPERTIES.—Anodyne and sedative. An effective preparation to allay pain, and promote rest.

Dose.—One to Two.

Opium, Camphor and Tannin.

Opium, $\frac{1}{2}$ gr.
Camphor, 1 gr.
Tannin, 2 gra. } Three and one-fourth grains.

PROPERTIES.—Astringent, united with sedative and soothing tendencies. May be used in diabetes, to arrest excessive perspiration, and in chronic diarrhea and dysentery.

Dose.—One to Two.

Phytolaccin. One-half grain.

PROPERTIES.—Extolled as an alterative in syphilitic, scrofulous, rheumatic and cutaneous diseases. See *Phytolacca Decandra*, page 71.

Dose.—One to Two.

Podophyllum, Ext. (*Mandrake*.) One grain.

PROPERTIES.—Hydragogue and deobstruent, and in small doses alterative. Valuable in many chronic complaints. Will often break up bilious and typhoid febrile diseases, if administered in sufficient quantities in the early stages of these complaints. See *Podophyllum Peltatum*, page 74.

Dose.—Three to Eight.

Podophyllin. One-half, and one grain.

PROPERTIES.—A popular and active purgative. Remarkably small doses will affect some persons, producing prompt and abundant evacuations. To ensure its action on an acid stomach, alkalies should previously be administered to neutralize the acid. See *Podophyllum Peltatum*, page 74.

Dose.—($\frac{1}{2}$ grain) One to Two.

Podophyllin Compound.

Podophyllin, $\frac{1}{2}$ gr.,
Ext. Hyoscyamus, $\frac{1}{4}$ gr.,
" Nux Vomica, $\frac{1}{16}$ gr. } One grain.

PROPERTIES.—Reliable purgative, acting on the bowels promptly, and unattended by the disagreeable sequelæ which generally follow the administration of cathartic medicines. Too much can not be said in favor of this combination.

Dose.—One to two.

Podophyllin and Blue Pill.

Podophyllin, $\frac{1}{4}$ gr.,
Blue Pill, $2\frac{1}{2}$ gr., } Three grains.

PROPERTIES.—An excellent alternative and cholagogue combination.

Dose.—One to Two.

Poppy, Ext. Two grains.

PROPERTIES.—Possesses properties analogous to opium, but in an inferior degree. See *Papaver Somniferum*, page 70.

Dose.—Two to Four.

Potass., Tartrate of and Iron. Two grains.

PROPERTIES.—Combines the cooling purgative qualities of the tartrate, with the tonic properties of the iron.

Dose.—Two to Four.

Potass., Iodide. Two grains.

PROPERTIES.—Useful in scrofulous affections, and is one of the best alternative remedies in mercurio-syphilitic sore throat.

Dose.—One to Five.

Potass., Bromide. One grain.

PROPERTIES.—Cases of enlarged spleen and liver, swellings of the lymphatic glands, hypertrophy of the heart, secondary syphilis and epilepsy have been treated successfully by this preparation. It is considered a very superior antiphrodisiac.

Dose.—Three to Six

Quinine, Sulphate. One-fourth, one, two, and three grains

PROPERTIES.—Produces upon the system, so far as can be judged from observation, the same effects as Peruvian bark, without being so apt to nauseate and oppress the stomach. It has the advantage over that remedy, not only that it is more easily administered in large doses, and more readily retained by the stomach, but that, in cases which require an impression to be made through the rectum or the skin, it is much more effectual; because from the smallness of the bulk, it is more readily retained in the former case, and more speedily absorbed in the latter.

Dose.—[1 grain.] One to Six.

Quinine Compound.

Quinine, Sulphate, 1 gr.,
 Iron, by Hydrogen, 1 gr.,
 Arsenious Acid, 1-32 gr. } Two and one-thirty-second grains.

PROPERTIES.—A useful preparation in all diseases attended with symptoms of periodicity.

Dose.—One to Three.

Quinine, Sulphate and Ext. Belladonna.

Quinine, 1 gr.
 Belladonna, Ext., $\frac{1}{2}$ gr. } One and a half-grains.

PROPERTIES.—These pills appear to be indicated in cases of great prostration, complicated with nervous irritation, generally where it is desired to obtain the *combined* influence of an anodyne, or calmative and tonic.

Dose.—One to Four.

Quinine Sulphate and Iron.

Quinine, 1 gr.,
 Iron, by Hydrogen, 1 gr. } Two grains.

PROPERTIES.—Tonic and chalybeate. Beneficial in weak conditions dependent on a deficiency of red blood corpuscles.

Dose.—One to Four.

Quinine Sulphate Iron and Strychnia.

Quinine, 1 gr.
 Iron, Carb., Vallet's, 2 grs.
 Strychnia Sulph., 1-60 gr., } Three and one-sixtieth grains.

PROPERTIES.—Blood restorative, tonic and nervine stimulant. A convenient mode of administering in combination, quinine, Vallet's preparation and strychnia. May be employed in atonic dyspepsia, in some types of paralysis, chorea and amenorrhea.

Dose.—One to Two.

Quinine, Valerianate. One-half grain.

PROPERTIES.—Anti-periodic and anti-spasmodic. Prof. I. G. Jones extravagantly lauds it in hemicrania, in febrile and other disorders, to control restlessness, wakefulness, and nervous irritability. Particularly useful in intermittent neuralgia. Claimed to produce less nervous disorder than the sulphate.

Dose.—One to Three.

Quassia, Ext. One grain.

PROPERTIES.—Stomachic, tonic and febrifuge. It possesses

ses advantages over most other vegetable tonics, in that it does not produce constipation, increase of animal or arterial excitement. See *Simaruba Excelsa*, page 89.

Dose.—Three to Five.

Rhei, Ext. One grain.

PROPERTIES.—Rhubarb is cathartic and astringent. Is much used as a laxative for infants. In small doses it appears to invigorate the powers of digestion. Rhubarb claims the preference to all other medicines in cases where the stomach is enfeebled or the bowels relaxed, and at the same time a gentle cathartic is required. See *Rheum Palmatum*, page 80.

Dose.—Two to Six.

Rhei *Pil. Rhei, U. S. P.*

Rhei, 3 gra.	} Four grains.
Soap, 1 "	

PROPERTIES.—Valuable in habitual constipation. Soap appears to counteract the astringent effects of rhubarb.

Dose.—One to Two.

Rhei, Ext. Compound. *Pil. Rhei Composita U. S. P.*

Rhei, Ext., 2 gra.,	} Four and one-half grains.
Aloes, 1½ gra.,	
Myrrh, 1 gr.,	
Oil Peppermint,	

PROPERTIES.—Warm, tonic, laxative. Useful in costiveness, with debility of the stomach.

Dose.—Two to Five.

Rhei Ext. and Blue Pill.

Rhei, Ext.,	} Four grains.
Blue Pill,	
Soda, Carbonate,	

PROPERTIES.—Alterative, cholagogue and slightly laxative.

Dose.—One to Two.

Rhei and Iron. Three grains.

PROPERTIES.—Combines the properties of a superior tonic and laxative; and is well adapted to those conditions in which there is loss of appetite and strength complicated with constipation, or even a relaxed state of the bowels requiring a gentle cathartic.

Dose.—Two to Three.

Rheumatic.

Ext. Colocynth, Compound, $1\frac{1}{2}$ gr.,	} Three and one-sixth grains.
" Colchici Acet., 1 gr.,	
" Hyoscyami, $\frac{1}{2}$ gr.,	
Calomel, $\frac{1}{2}$ gr.,	

PROPERTIES.—An admirable compound pill for rheumatic affections. If given in the early stages, it will often check the progress of this disease and avert its painful adherents.

Dose.—One to Two.

Santonin. One-half grain.

PROPERTIES.—The exclusive anthelmintic principle of *A. Santonica*. Has been widely used in Europe for its vermifuge properties.

Dr. Waring says, "In cases of *ascarides lumbricoides*, santonin is invaluable. Its efficacy has been attested by all who have recorded their experience in its use. My own experience with it, which has been very extensive, has been most satisfactory." An aperient is advised a few hours after the last dose of Santonin. Dr. Chipperfield says there should be an interim of eight hours between the doses, and not more than three doses should be administered in succession, nor should it be re-employed within an interval of two or three days.

Dr. Waring still further remarks: "In chorea, epilepsy, hysteria, and in many nervous and convulsive affections in women and children, santonin, in my practice, has very frequently disclosed the unsuspected cause of the affection, viz., worms."

Dose.—Two to Four.

Sanguinaria, Ext. (*Bloodroot*) One-half-grain.

PROPERTIES.—In small doses it stimulates the digestive organs, and increases the action of the heart and arteries, while a free use produces a sedative influence on the heart. Has been found useful in torpid conditions of the liver, in scrofulous pneumonia, rheumatism, jaundice, &c. See *Sanguinaria Canadensis*, page 84.

Dose.—One to Five.

Sanguinarin. One-half, and one grain.

PROPERTIES.—Same as blood root.

Dose.—($\frac{1}{2}$ grain) One to Four; (1 grain) One to Two.

Sarsaparilla, Ext. Three grains.

PROPERTIES.—One of the most highly useful alteratives in

the materia medica. Unless properly prepared it will prove inert.

Dose.—Two to Five.

Savin. One grain.

PROPERTIES.—Emmenagogue and ecboic. Savin operates actively on the uterine system. Caution is demanded in its exhibition. See *Juniperus Sabina*, page 56.

Dose.—One to Five.

Senna, Ext. Two grains.

PROPERTIES.—A reliable and convenient cathartic. Indicated in all conditions, when the object is to produce a slight impression on the bowels. See *Cassia Acutifolia*, page 18.

Dose.—One to Two.

Soap and Opium. *Pil. Saponis Composita.* U. S. P. Three grains.

PROPERTIES.—A convenient form for administering opium in small quantities.

Dose.—One to Three.

Soda, Bi-Carbonate. Four grains.

PROPERTIES.—This salt has the general medical properties of the carbonate, but is less irritating. It is often resorted to in calculous cases, characterized by excess of uric acid. It has been given in infantile croup, with apparent advantage in promoting the expulsion of the false membrane. Dr. Lemaire has proposed it as an antiphlogistic remedy in the treatment of pneumonia, croup, and membranous angina, supposing it to act on the principle of removing from the blood the excess of fibrine, which exists in that liquid in inflammation. According to M. Jeannel, the use of bicarbonate of Soda lessens the sugar in the urine of diabetic patients.

Dose.—Two to Five.

Squill Compound. *Pil. Scillæ Composita.* U. S. P. Three grains.

PROPERTIES.—Applicable to the treatment of chronic affections of the bronchial membrane.

Dose.—Two to Three.

Stillingin. One grain.

PROPERTIES.—Exerts an influence over the secreting functions unsurpassed by any other known alterative. Has almost a specific action in syphilitic affections, and is a remedy of much importance in scrofulous, hepatic and cutaneous diseases.

Dose.—Two to Five

Strychnia. One forty-eighth, one thirty-second, and one-sixteenth grain.

PROPERTIES.—Strychnia is used in hemiplegia, paraplegia, partial paralysis of particular joints or muscles, and of the bladder. It has likewise been used in neuralgia, epilepsy, ague, amenorrhea, dysentery, rheumatism, syphilitic osteocopi and obstinate constipation. Dr. Pereira has seen it serviceable in that shaking or trembling action of the muscles, which is produced by habitual constipation. In asthma it has been prescribed in very minute doses. It has also proved successful in tic-douloureux, and in nervous headaches, in dyspepsia, chorea, catalepsy, gleet and diabetes.

Dose.—($\frac{1}{48}$ grain) One to Two.

Stramonium, Ext. One-half, and one grain.

PROPERTIES.—Anodyne, anti-spasmodic; will prove useful in those cases where opium is indicated but interdicted by some idiosyncrasy of constitution.

Dose.—($\frac{1}{4}$ grain) One to Two.

Tartar Emetic. One-fourth grain.

PROPERTIES.—One-fourth grain repeated every two or three hours produces nausea and diaphoresis, for which purpose it is used in febrile and inflammatory diseases, especially of the thoracic organs. Employed as an emetic at the commencement of fevers, especially those of an intermittent and bilious character; in jaundice, whooping-cough and croup; and in several diseases of the nervous system, such as mania, amaurosis, tic-douloureux, &c.

Dose.—One to Two.

Taraxacum, Ext. Three grains.

PROPERTIES.—An excellent remedy to remove torpor and engorgement of the liver. One of the most valuable properties of dandelion consists in its local action on the *liver*: a torpid state of this organ produces those symptoms which are known as bilious.

A disordered state of the *liver* is intimately related to that most common of all diseases, dyspepsia. The bile, which is nature's stimulus in promoting peristaltic action of the bowels, is increased when deficient, and improved when vitiated; various medical authors mention its use and success in deranged conditions of the digestive organs connected with an abnormal state of the liver, and in dropsical effusions arising from the same cause.

A peculiar nervous susceptibility common among dyspeptics, caused by the action of unhealthy acrid bile upon the ir-

ritable mucous surface of the bowels, in which a variety of distressing apprehensions occur, such as sudden death, approaching illness, or of great personal danger, together with an utter inability of fixing the attention upon any subject, or engaging in any thing that demands exertion, may be relieved or entirely cured by a faithful use of the extract. Its use in *jaundice* has been highly extolled by many writers of established reputation, and its use is sustained by the experience of physicians of the present day. As an aperient, it acts gently and without weakening the system. In promoting healthy secretions, and restoring the various functions of the system to a state of health and vigor, it is unsurpassed by any other medicinal agent. See *Taraxacum Dens-Leonis*, page 99.

Dose.—Three to Six.

Tannin. One grain.

PROPERTIES.—"Tannin is a useful remedy in most forms of hemorrhage, after a sufficient reduction of arterial action by depletory measures. In diarrhea, it is probably more beneficial than ordinary astringents, as less liable to irritate the stomach and bowels. It has been found beneficial in colliquative sweats, in cases of chronic catarrh with excessive and debilitating expectoration, in the advanced stages of whooping-cough and cystirrhæa."

Dose.—Two to Four.

Triplex.

Aloes, Ext., two parts,	} Three grains.
Podophyllin,	
Blue Mass, ss 1 part.	

PROPERTIES.—Potent antibilious combination. The most satisfactory results follow its administration in the incipient stages of fevers.

Dose.—Two to Four.

Uva Ursi, Ext. Two grains.

PROPERTIES.—The assertions in regard to the properties of this plant are contradictory. By some it is claimed to have a special direction to the urinary organs, while by others its peculiar effects are ascribed to its astringent and tonic powers. But whatever may be its properties or its mode of action, it is undoubtedly useful in chronic diarrhea, dysentery, menorrhagia, diabetes, in chronic affections of the bladder and urinary apparatus, chronic gonorrhea, strangury, fluor albus, &c. It is also thought to be highly antilithic. The pills

may be administered two or three times a day. See *Arctostaphylos Uva Ursi*, page 5.

Dose.—One to Seven.

Valerian, Ext. Two grains.

PROPERTIES.—Stimulant tonic and anti-spasmodic. Dr. Waring says, "It ranks in efficacy next to assafoetida, and is said to be a useful adjunct to cinchona in intermittents." This agent has proved eminently useful in hysterical headaches, hysteria, mania, melancholia and in some types of delirium tremens. See *Valeriana Officinalis*, page 101.

Dose.—One to Five.

Valerianate of Ammonia. One grain.

PROPERTIES.—Pills of this salt are highly commended in nervous irritability, epilepsy, chorea, headache and neuralgia.

Dose.—Two to Six.

Valerianate of Iron. One grain.

PROPERTIES.—See *Iron, Valerianate*.

Dose.—One to Two.

Valerianate of Morphia. One-eighth grain.

PROPERTIES.—See *Morphia, Valerianate*.

Dose.—Two to Four.

Valerianate of Quinia. One-half grain.

PROPERTIES.—See *Quinine, Valerianate*.

Dose.—One to Three.

Valerianate of Zinc. One grain.

PROPERTIES.—An important and efficient remedy in neuralgia, nervous headache, hysteria and other painful diseases which have their origin in nervous derangements.

Dose.—One.

Veratria. One thirty-second part of a grain.

PROPERTIES.—Has been employed chiefly in gout, rheumatism and neuralgia; also in various nervous affections, as paralysis, whooping-cough, epilepsy, hysteria, and disorders dependent upon spinal irritation. See *Veratrum*, page 102.

Dose.—One to Three.

Veratrum Viride. One-fourth, and one-half grain.

PROPERTIES.—Prof. Tully regards veratrum eminently efficacious in the management of gout, rheumatism, much superior to colchicum. Dr. Turnbull has found it useful also in diseases of the heart, particularly those of a functional character. It has been most efficacious in nervous diseases, such as neuralgia, prosopalgia and ischias. Ebers found advantage from its use in chorea, hypochondriasis and hysteria. M. Piédagnel affirms that he succeeded in curing acute articular rheumatism by it in seven or eight days. See *Veratrum Viride*, page 101.

Dose.—($\frac{1}{4}$ grain) One to Two.

CHEMICALS

AND

PHARMACEUTICAL PREPARATIONS.

Acid, Carbolic.*Crystals, Pure and Solution.*

Carbolic acid is an escharotic stimulant, rubefacient and antiseptic. It possesses very important disinfecting deodorizing, and antiseptic powers. Its specific action upon all organic and inorganic matter preserves it from putrefaction and decay. In addition to these properties it acts when locally applied, as an escharotic, or diluted, as a stimulant; when given internally it resembles Creasote in its power of allaying several forms of vomiting and gastric irritability. Dr. Godfrey found benefit from its use in vomiting in pregnancy flatulency of old age, diarrhoea, putrid discharges from the mouth, throat, ears, rectum and vagina. It is used as a gargle in stomatitis, aphthæ, diphtheria and ulcerated sore throat, as a wash in ill-conditioned ulcers, sloughing wounds, cancerous ulcerations, fetid perspiration of feet, or as a disinfectant for faecal mater, contagion of sick room, cesspools, &c. This acid applied to hemorrhoid, is said to congeal the contents of the sac, and finally to corrugate and obliterate it entirely. Used in the form of an ointment or strong solution, it speedily cures scabies, and destroys psora insects, pediculi of every type.

In the *Boston Medical and Surgical Journal*, vol. 69, may be found a communication taken from the *London Lancet*, in which the therapeutic properties of carbolic acid are ably defended by Crace Calvert, P. H. D., F. R. S. He quotes extensively from Thomas Turner, an eminent British surgeon, regarding its superior virtues in diphtheria, ulcers, fistulæ and hemorrhoids. A mixture is advised by Dr. Turner, of two drams of pure solution carbolic acid in one dram of liquor potassæ and half a pint of water, in cases where it is desirable to employ the acid in a less diluted state than the aqueous solution, and yet not in its full strength as a caustic. Dr. C. gave it very successfully in one or two cases of intestinal worms, in doses of a teaspoonful of the aqueous solution in a

tumbler of water, morning and evening. He calls attention to a severe case of sloughing which was checked by an external application of the acid, and cites authority to prove its ability to promote granulation and hasten the healing of the wounds.

The saturated solution contains $\frac{3}{4}$ ii. of the salt to one gallon of water.

Dose, one drop of the deliquesced acid largely diluted in water, or in the form of pill, may be given.

Acid, Chromic.

Chromic acid is a powerful caustic. It is much used as an escharotic in syphilitic vegetations, in ulcerations, condylomata, warts and morbid growths. Dr. Heller and others attest its efficacy where a deeply penetrating, gradual caustic is indicated. Dr. Marshall found it effective for removing warts and other morbid growths from the genital organs. It is also used for obliterating external hemorrhoids. It is said to be less painful than other caustics; acts as a rapid solvent of organic matter.

The utility of chromic acid in syphilitic vegetations is attested by Mr. Hairon, (*Annales Oculistique*). He asserts he has employed it with marked success, and also recommends it for certain forms of granular eyelid. "However," says the *Annales Oculistique*, "its application, whether to these syphilitic vegetations or to fungous granulations of the conjunctiva, is never attended with pain or reaction, notwithstanding the rapid destruction of tissue that takes place."

Aloin.

This substance is the active principle of aloes. It has been found to operate invariably as a cathartic, in the dose of one or two grains, and occasionally, in that of a half grain.

Ammonia.

The salts of ammonia constitute some of the most valuable agents in the materia medica, and are applicable in the treatment of a variety of diseases. Many of them are classed among our most reliable alteratives, others as stimulants, all possessing, in a high degree, antacid, anti-spasmodic and alexipharmic properties. According to Dr. B. W. Richardson, the blood contains ammonia as a normal constituent, and the coagulation of the blood depends on the evolution of this principle. Dr. O. Ward claims they have the power of dissolving the blood corpuscles, and the protein textures generally; and "while their primary action is stimulant, their remote operation is sedative, resolvent and attenuant, implying the power of carrying the products of inflammation out of the system.

According to the theory of Dr. Richardson, a superalkaline state of the blood, as observed in diseases of a typhoid type and suppressed action of the kidneys, contra-indicates the use of this agent. Dr. Waring remarks as follows on the utility of ammonia: "It is most useful in all cases when the fluidity of the blood and plastic tissues are required; in all cases of the inflammatory type when fibrin is in excess, and when there is rapid oxidation; in cases of induration of the tissues; and it may be given as the other alkalis, when acidity of the secretions is a prominent symptom, as in acute rheumatism.

"Salts of ammonia, with a vegetable acid, such as the citrate or nitrate, exert no influences in producing an alterative condition of the urine. The ammonia is either oxidized and converted into nitric acid, or more probably eliminated by the skin and mucous membranes. It does not pass through the renal organs."

The vapor of ammonia is a nervine stimulant, the efficiency of which is best seen in syncope, and is also beneficial in the incipient stages of coryza, tonsillitis, and even pulmonary catarrh. Externally ammonia is useful as a counter-irritant, and the ammoniated liniment may be beneficially applied to relieve frost-bite. Ammonia is the basis of the following preparations:

Ammonia, Aqua Fortior.

The gas constitutes 26 per cent. of the solution. This preparation of ammonia is too strong for medicinal use in its undiluted state. Its principal employment is externally as an rubefacient, vesicant, and caustic. Applicable in the arts to photography, &c.

Ammonia, Elixir of Valerianate of

Valerianate of ammonia is a powerful nervine stimulant and anti-spasmodic. Its efficacy in neuralgia has been attested by several writers. M. Déclat, of Paris, first called the attention of the profession to the use of this agent in neuralgia, and what his experience demonstrated concerning its curative influence in this disorder, has since been confirmed by abundant authority. Dr. O'Connor recorded several cases illustrative of its highly beneficial effects in this disordered state of the nerves. The *Lancet* of 1862 refers to its favorable employment in diseases of a similar character. Stillé adds: "M. Déclat has published an account of the efficacy of valerianate of ammonia in facial neuralgia, which had for years resisted every other known treatment, both local and general."

Over simple, so-called, nervous headaches, it is said to exercise more control than any other remedy.

Its popularity and efficiency in neuralgia suggested its employment in some types of chorea, epilepsy, hysteria, nervous irritability, and in allied affections; and in these diseases it has acquired a wide and merited celebrity, seldom disappointing expectations. Its influence over epilepsy deserves more than passing attention, for many cases could be cited where epileptics received great benefit from its use.

In neuralgic paroxysms, supervening intense choroiditis, when the system has been reduced by depletion and low diet, it has been known to give relief, produce tranquil sleep, and improve the appetite, and that too when sulphate of quinine seemed merely to exasperate the pain.

The elixir presents the preparation in a pleasant and agreeable form of administration, without materially altering the effects of these agents when crudely combined. It may be said to possess all the medicinal utility of Pierlot's Solution of Valerianate of Ammonia, without being open to the objection of being so disagreeable both in taste and odor, an objection of no little consideration with the physician, contending, as he often must in diseases, with stomachs easily revolted by anything bordering on the offensive in medicine, an objection too, which has thrown many a valuable instrument to combat disease into practical disuse.

Ever since the valerianate of ammonia became introduced into medicine, and its utility fairly established, the profession has called for some form of exhibition to masque its offensiveness, which demand is satisfied in the elixir, without materially altering its efficacy.

Another agreeable mode of administration is in the form of pills coated so as conceal all disagreeable odor.

Each fluid dram contains two grains of the salt.

Dose, one-half to one fluid dram.

Ammonia and Quinia, Elixir of Valerianate of.

This preparation contains the nervine stimulant and anti-spasmodic properties of valerianate of ammonia together with the anti-periodic virtues of valerianate of quinia. The former is eminently applicable in neuralgia, hysteria, epilepsy, and kindred affections, and has received high encomiums for its promptness of action in controlling this class of disorders. The valerianate of quinia is tonic, febrifuge and sedative, and is pronounced by some to be a more powerful anti-periodic than the sulphate, even when given in smaller doses, to act more kindly, and not liable to occasion the same neuropathic phenomena. It has been employed with signal success in intermittent or remittent fever, and here observ-

ed to give at least temporary relief after the sulphate of quinia had proved abortive and some of the most vaunted remedies, useless.

By this combination we have an agent whose therapeutical influence is that both of a well known and highly efficient nervine stimulant, anti-spasmodic and anti-periodic.

This elixir may be used in debility attended with nervous disorders, intermittent neuralgia, hemicrania, and in febrile or other diseases, to remove restlessness, wakefulness, and nervous irritability.

Each fluid dram contains two grains of valerianate of ammonia and one-fourth grain of valerianate of quinia.

Dose, one-half to one dram repeated several times a day, according to indications.

Ammonia and Strychnia, Elixir of Valerianate of

Neurotic tonic and stimulant. The medicines which enter into this combination are severally potent and multiform in their action, and individually have been extensively used in the multifarious forms in which the neuroses are developed, and with so uniformly gratifying results, as to give them a very wide celebrity in combating nervous maladies and their concomitant symptoms, and in the combined state are said to possess marvellous virtues. The most unpleasant, annoying and painful nervous complaints are oftentimes traced directly to atony of the gastric-secretory glands and impairment of the entire digestive apparatus. This elixir is recommended for such morbid states. It not only temporarily reduces excitability, pacifies the nerves which give rise to the multitude of sympathetic pains, but promotes integrity of action and imparts tone to the nerves which controls the functions of the *primæ viæ*, where resides the primary cause of the disorder, and thus effects a permanent cure.

In hysterical affections, sleeplessness, sick-headache, flushes of heat in the face, burning of the hands, inability to fix the attention long on any particular subject, and in the distressing and often intractable symptoms of dyspepsia, it will prove of much service.

Each fluid dram contains two grains of valerianate of ammonia and one-sixteenth grain of valerianate of strychnia.

Dose, one-half to one dram, repeated as often as indications require.

Ammonia, Hypophosphite of

Stimulant tonic. It is one of the agents recommended in the treatment of pulmonary tuberculosis. The employment of this remedy is indicated in that class of maladies characterized by a want of nervous tone and integrity, and in some types of mental

aberrance and defective osseous formation. In most cases of languor and debility, restlessness and spasmodic action of the muscles associated with atony of the nervous system, much benefit may be expected from it.

Dose, ten to thirty grains.

Ammonia, Oxalate of

The Oxalate will admit of quite an extensive range in its application. In some stages of typhoid fever, when a mild alterative would appear indicated, this agent will be found useful. It may be employed in most diseases of atony with a prospect of success. It has acquired some reputation in eruptive fevers, such as scarlatina and rubeola. It is said to be useful in leucorrhea, gleet, chronic sore throat, &c.

Ammonia, Phosphate of

The phosphate of ammonia was introduced into medicine by Dr. Buckler of Baltimore, in the year 1846, as an agent of much value to combat gout and rheumatism.

His theory was that it decomposes the insoluble urate of soda, which is the probable basis of gouty and rheumatic concretions, and leads to the formation of two soluble salts, phosphate of soda and urate of ammonia, which may be readily eliminated by the secretions. Stillé remarks, "Dr. Edwards, in England, used it with great success in almost every variety of gout and rheumatism, both prior to the development of the inflammatory stage and after its partial subsidence." "This remedy was fairly tried in acute and sub-acute rheumatic cases, by Dr. Pepper, at the Pennsylvania Hospital, and patients recovered under its use, sometimes, when other plans of treatment had failed." Its employment is also spoken of to prevent the formation of calculi. It may be given in doses of from three to twenty grains, three times a day, diluted in water.

Ammonia, Spirits of

Spirits of ammonia are stimulant, antispasmodic, and alexipharmic. Ammonia is adapted for speedily rousing the action of the vascular and respiratory systems and for the prompt alleviation of spasms. As an internal and external remedy to obviate the sequelæ of the bite of rabid animals, venomous insects and reptiles, its power is well known. By way of inhalation, it is administered when it is desired to make a strong impression on the nervous system, in cephalalgia, hemicrania, and faintness or collapse. Am-

moniacal inhalations have been found very useful in asphyxia, and to prevent an attack of epilepsy.

Ammonia, Aromatic Spirits of

Stimulant and alexipharmic. Medicinal properties bear a close resemblance to those of the simple spirits. It is a weaker preparation, and has the preference with physicians on account of its grateful taste and smell.

In languor, syncope, hysteria, and nervous debility, it proves very serviceable. In the flatulent colic of children (gutt. ij-v in milk), it affords more speedy relief than any other remedy. In sick headache, heartburn and acidity of the primæ viæ, it proves speedily effectual.

Dose, thirty to sixty drops, diluted with water.

Ammonia, Valerianate of

(Crystals.)

Particularly valuable in neuralgia and all nervous affections. For a more extended notice of its therapeutical uses, see *Ammonia, Elixir Valerianate of*.

Dose, two to eight grains, dissolved in water.

Ammonium, Bromide of

Dr. Gibb, alluding to the therapeutic agency of this compound, recommends it as an absorbent in glandular and other enlargements; as especially fitted for functional nervous diseases, and as possessing no inconsiderable power to control affections of the mucous membranes and the skin. He gives it a value in epilepsy, attributes to it an almost magical efficacy in some forms of ovaritis, favors its administration in strumous ophthalmia in the young, and thinks its influence may be beneficial in corpulency to promote the absorption of adipose tissue, and modify or lessen the secretions from the oily sudoriferous glands. Cases of chorea and whooping-cough have been cured by this drug. Favorable mention is made of its utility in conjunctivitis, corneitis and leucoma. It may be given in doses varying from two to ten grains, three times a day.

Ammonium, Iodide of

Alterative, tonic, anti-syphilitic, and sometimes acting as a diuretic. It closely resembles the iodide of potassium but is more powerful.

Dr. Dunglison observes: "It was introduced into medical practice by M. Biett, of Paris, as a valuable therapeutical agent in certain diseases of the skin. Several successful cases of its employment in lepra and psoriasis, by M. Biett, are given by Dr. Pennock."

Dr. Waring remarks: "It appears especially adapted to syphilitic affections of the skin. In syphilitic affections it was first employed by Dr. B. W. Richardson, who reported favorably of its operation. More recently it has been systematically tried by Dr. Gamberini, who considers: 1. That it is suitable for all cases in which the iodides of potassium and sodium are employed. 2. That it leads to a rapid cure. 3. That there is great tolerance of the remedy. 4. That employed in friction with olive oil (gr. iij ad Ol. 3 ij), it causes the disappearance of nocturnal syphilitic pains. 5. That under its internal use indurations consecutive of chancre, disappear, as do also indurated glands of the groin. 6. That arthralgia, rheumatoid affections, periostitis, enlarged glands, and papulo-vesicular eruptions, are forms of syphilis most readily cured by this salt. 7. The signs of intolerance are a sense of burning in the throat, and heat of the stomach, but these rapidly disappear on the suspension of the medicine for a couple of days. It seems well worthy of a more extended use.

"In scrofula, attended with glandular enlargement, as incipient phthisis, and in chronic rheumatism, Dr. Richardson used the iodide with advantage. In enlarged tonsils, he found a solution of the iodide (3 ss) in glycerin (f 3 i) very efficacious. It was applied at night with a camel's hair brush."

Dose, one to three grains.

Aromatic Compound.

(Composed of *Ginger, Cinnamon, Cardamon, and other Corrigents.*)

Used principally for flavoring extracts, and counteracting the unpleasant taste of medicines.

Medicinally, applicable in griping of the bowels, &c.

Dose, one to two drams.

Arsenic, Iodide of

Alterative and tonic. When given internally it is absorbed into the system, and is eliminated by the urine, saliva and perspiration. It is a powerful remedy, and requires to be given with great caution. Dr. Walshe pronounces it one of the most valuable remedies in use for cancer. The results of his experience are,

that though it can claim no decided curative powers for cancer, yet under its administration pain of the tumor decreases, and the size generally diminishes, the enlargement becomes suspended, and the health of the patient improves. Dr. Waring thus sums up the conclusions of Dr. Walshe:—

"1. Given, in doses of from $\frac{1}{16}$ to $\frac{1}{8}$ of a grain, twice a day, two hours after eating, the iodide of arsenic is well borne, and may be continued without risk for several months.

"2. The system, generally, soon gives evidence of its action: unusual palpitation, with dryness of the fauces and of the alimentary canal, occur; sometimes slight headache is complained of, but this is rare; and I have known the most violent *periodic headache*, which had affected a lady for years, disappear while she was under the influence of this salt.

"3. The pain of the tumor decreases in volume.

"4. The size of breast generally diminishes; and, if the tumor itself does not actually lessen in bulk, I have at least found that its enlargement, previously more or less active and apparent, becomes, as far as can be determined, suspended.

"5. The general health improves."

Dr. A. T. Thompson has employed this medicine with success, in doses of $\frac{1}{16}$ of a grain, in lepra, psoriasis and impetigo, while Dr. Nelligan claims there is no better constitutional remedy in *tinea capitis*.

He prescribed it in doses of $\frac{1}{16}$ of a grain to $\frac{1}{4}$ for an adult, and from $\frac{1}{32}$ to $\frac{1}{16}$ for young children.

Dose, $\frac{1}{16}$ to $\frac{1}{8}$ of a grain, three times a day.

Arsenic and Mercury, Solution Iodides of.

(Donovan's Solution.)

Each fluid dram contains Teriodide of Arsenic equal to $\frac{1}{8}$ grain of Arsenious Acid, of Iodide of Mercury equivalent to $\frac{1}{4}$ grain of the Peroxide of Mercury, and $\frac{1}{2}$ grain of Iodine, converted into hydriodic acid.

Powerful alterative particularly adapted to the treatment of venereal diseases, cancerous diseases, sycosis, urticaria or nettle rash, lepra, diseases of the scalp, and other obstinate cutaneous affections. A persistent use of this medicine for months is requisite in order to accomplish the desired effect. Sometimes it will occasion derangement of the stomach, confinement of the bowels, headache, nausea, mental disturbances, and even salivation. When these morbid symptoms occur, the drug should be discontinued, and a purgative administered.

Dose, five to twenty drops in distilled water, given three times a day.

Incompatibles.—Acids, opium, the salts of morphia, and many other salts.

Atropia.

See *Atropa Belladonna*, page 10. Dose, powdered), $\frac{1}{4}$ of a grain. Dose, (pill), $\frac{1}{4}$ grain.

Bismuth.

Bismuth possesses no acknowledged therapeutical value in an uncombined state. But the several preparations are highly extolled and widely employed in the painful affections of the stomach, in inflamed condition of mucous surfaces, and in derangements of the nervous system. Each has its able advocates to attest its peculiar curative or remedial powers.

Bismuth, Ammonio-Citrate of

(*Scales, Soluble in water.*)

Its ready solubility in the stomach renders it more desirable for administration than the sub-nitrate, or perhaps the other salts.

Dose, two grains, in substance, dissolved in water or syrup. In case the solution does not readily take place add a few drops of aqua ammonia.

Bismuth Liquor, or Liquid Bismuth.

The advantages of this preparation are, that the metal is in a perfect state of solution; being a solution of ammoniated citrate, it mixes with water and other fluids without precipitation. "It allays pain in acute irritability of the stomach, (without nausea, or much acidity), especially that which remains after ulceration," and is the most eligible form for the administration of Bismuth. Each fluid dram contains two grains of citrate of bismuth.

Dose, one-half to one dram.

Bismuth, Sub Carbonate of

Recommended by Prof. Hannon of Brussels as a substitute for the nitrate, who alleges for it the good qualities of the sub-nitrate,

that it is antacid, readily soluble in the gastric juice, rarely constipates, and may be employed for a long time without oppressing the stomach; it is insipid, excites no repugnance, and may be taken before meals.

Dr. Waring calls attention to this medicine in the vomiting of children during dentition, and in the diarrhea of weak children, remarking, "It may also be employed with every prospect of success." Dr. Hannon thinks the sub-carbonate is demanded in all cases of gastralgia following the phlegmasiæ of the digestive organs when there are acid or putrid eructions, in which there is a tendency to diarrhea and spasmodic vomiting. The dose for an adult is from ten to fifteen grains, for children, two to five.

Bismuth, Subnitrate of

The subnitrate of bismuth is tonic and anti-spasmodic, sedative and alterative. In consequence of its soothing influence upon irritated or inflamed mucous surfaces, it becomes an effective medicine in some forms of dyspepsia, heartburn, painful affections of the stomach, such as gastralgia, cardialgia and pyrosis; also in diarrhea of typhus fever, and consumption, and in subacute and chronic dysentery.

Stillé attributes to this drug an almost specific power in cases of pure gastralgia, stating its efficacy becomes impaired the more the disease is complicated with other disorders, and that it is necessary to combine with it other appropriate remedies in the treatment of individual cases, "vegetable tonics, when digestion continues feeble after the removal of the pain; alkalies or magnesia, when the vomited matters are intensely acid, and iron when evidences of anæmia exist. If constipation co-exist, magnesia, or small doses of saline aperients should be administered."

"This medicine is recommended in nervous vomiting, such as that of pregnancy, and that induced by cancer of the stomach, in those forms of gastric derangements characterized less by acute than by dull pain, or by an excessive secretion of acid in the stomach, and unnatural craving appetite for food, induced by a sense of perpetual sinking at the epigastrium, or accompanied by a profuse secretion of gas."

It works by way of eminence in those stages of diarrhea, when astringents and antacids are indicated, and has acquired considerable reputation in the treatment of diarrhea consequent on phthisis. Cases of tuberculous diarrhea are recorded which succumbed to this agent after the patient's life was despaired of, and a failure of the ordinary remedies to give relief. It may be administered in doses of from five to fifteen grains, three times a day.

Bismuth, Tannate of

This preparation combines the astringency of tannin with the sedative and tonic qualities of bismuth. Dr. Cap, of the Academy of Medicine, Paris, was first to call the attention of the profession to the therapeutics of this new product. From a consideration of the valuable properties of the two elements—tannin being a pure astringent, and bismuth possessing tonic properties, and a highly soothing influence upon irritated or inflamed mucous surfaces—was suggested to him the idea that a combination might be serviceable in chronic diarrhea, chronic gastritis, heartburn, dyspepsia, &c. Subsequently, experience with this new product proved the correctness of his conclusions, and corroborative of them we have the testimony of nearly all physicians who have given it a fair trial. Several cases of diarrhea are stated by Dr. C., which came under his own observation, where the disease was not only checked, but cures effected, by doses of two to four grammes. Dr. C. also records twelve cases, which other physicians had treated successfully by the adoption of his plan of medication. Cures were generally effected in two days.

This medicine is to all purposes, without taste, and the most sensitive and delicate constitutions do not object to taking it.

Dose, five to fifteen grains, two or three times a day.

Bismuth, Valerianate of

Sedative, astringent and anti-spasmodic. It is valuable in neuralgic affections, painful disorders of the stomach, chronic gastralgia and nervous palpitations. Particularly useful in gastrodynia of hysterical women, when combined with *belladonna*. It may be given in doses from one-half to two grains, three times a day.

Blackberry, Syrup of

The medical properties of blackberry are tonic and astringent. This syrup has been used in cases of diarrhea, dysentery, cholera infantum, relaxed states of the bowels of children, &c. The *Journal of Rational Medicine* contains a short though valuable paper upon the therapeutics of the blackberry root, by Dr. Sneed, of Culloden, Ohio; also the *Southern Medical and Surgical Journal*. Dr. S. maintains that its usefulness in disorders of the bowels does not depend principally upon the tannic acid it contains, but that its most powerful effects, in these instances, are attributable to the bitter, stimulant or tonic properties, distinct from its astringent ef-

fects. He avers that a small quantity of the fluid extract, taken into the stomach, increases the appetite, and at times, he finds, produces a glow over the surface of the body, which induces him to regard the therapeutic action rather as a stimulant than tonic, as mentioned by most writers. He says that he has found a preparation of the bark of the root grated, and cold water applied to it produces some of the most extraordinary cures in chronic diarrhea and dysentery, and even in cases when other medicines failed, and in the shortest possible time. His preparation, though less powerful, is similar in its action to the fluid extract, which is the most convenient form in which it can be used, as by the addition of cold water, the strength can readily be made to suit the emergency of any patient. He advises the administration of this remedy in small doses, five or six times a day.

This agent may be used as a tonic or stimulant, in other diseases than those of the bowels. In most cases of debility of children, attended with loss of appetite, this syrup, persevered in for a few days, will be found highly advantageous.

This is prepared from the formulæ of Surgeon Gen. U. S. A., and was found very efficacious in chronic diarrhea prevalent in the army; it is also an excellent substitute for the spiced syrup of rhubarb, where that remedy is deficient in astringency.

Dose, one-half to two drams.

Black Drop.

Black Drop is synonymous with *vinegar of opium*, *opii acetum*. This preparation disturbs the head less, distresses the stomach less, and constipates the bowels less than the crude drug, or the many preparations of opium. It is of double the strength of laudanum, six and a half minims containing the soluble parts of about one grain of opium. It exhibits all the anodyne or soporific properties of the narcotic, and may be advantageously used, in many instances, when in consequence of some idiosyncrasy in the disease or in the constitution of the patient, opium itself or laudanum is contra-indicated, because they occasion headache, nausea and other disagreeable sequelæ.

Dose, one to ten drops.

Calcium, Iodide of.

This preparation possesses alterative and tonic properties. The January issue of Braithwaite's Retrospect, of 1860, contains the subjoined short article on the merits of iodide of calcium: "This salt is very valuable in cases in which the iodide of potassium is

inadmissible. It does not occasion iodism, or resorption of the healthy tissues; it does not excite the circulation, nor irritate the stomach and bladder, by passing off too rapidly by the kidneys.

"Its solution in milk is perfectly tasteless. It is particularly useful in squamous diseases of the skin, and chronic and metallic poisoning by mercury, lead and copper."

Dose, one-fourth of a grain in solution three time daily

Calisaya.

Calisaya is a species of cinchona known as *cinchona flava*, or yellow bark. It is tonic, astringent and anti-periodic. All the cinchona varieties possess similar therapeutic uses, though their utility depends on the proportion in which the alkaloids are present in them. Calisaya is almost free from the astringent principle, is very rich in quinia, and the most highly esteemed of all the varieties of Peruvian bark. It will be found beneficial in all chronic affections attended with periodicity, great feebleness, or nocturnal perspiration, in those cases where morbid discharges have reduced the system. It appears to be contra-indicated in acute inflammation, inflammatory fevers, plethora, active hemorrhages, and in all nervous or vascular irritations.

Calisaya, Elixir of.

Calisaya constitutes the active agent of this elegant aromatic preparation. It is an agreeable and general tonic in convalescence from disease in children and feeble persons, and prophylactic against intermittents. Its tonic, anti-intermittent and sedative properties render it highly useful in a great variety of diseases, and while it is characteristically febrifuge, it can be used in most cases where tonics are prescribed. It is advised in adynamic and gangrenous affections, in typhoid fevers with extreme prostration, in passive hemorrhages accompanied with great feebleness, &c. It is useful in the treatment of gout, chronic rheumatism, scorbuta, and scorbutic maladies.

It will be found of great advantage in dyspepsia, attended with irritation of the stomach; in severe diarrheas and those that have been chronic; in long continued inflammations of the mucous membranes, better treated with tonics than anti-phlogistically, in cases of convalescence, when the system is recovering from prostration; and generally in weak and prostrated states of the system, particularly during summer months.

Each fluid ounce contains forty grains of true calisaya bark.

Dose, one to two drams.

Calisaya and Pyrophosphate of Iron, Elixir of

This is one of the most acceptable tonic preparations ever made. It combines all the virtues of the calisaya bark with the important medicines, iron and phosphorus, in the form of the pyro-phosphate of iron, a very mild, nearly tasteless salt, acceptable to the most delicate stomach, easily assimilated and having no tendency to pervert the gastric and intestinal secretions, which are the results of many of the chalybeates. The iron and bark principles are so combined in this preparation as to form a pleasant aromatic cordial, devoid of any ferruginous taste. It is efficient both as a tonic and chalybeate, and applicable to a numerous class of obvious diseases.

Each fluid ounce contains thirty grains of calisaya, and twelve grains of iron.

Dose, one to two drams.

Calisaya, Iron and Bismuth, Elixir of

This preparation combines all the valuable properties of calisaya and iron, with those of the ammonio-citrate of bismuth, and has been used with marked effect in dyspepsia, anæmia, female debility, as a general tonic.

The ammonio-citrate of bismuth operates on the system in smaller doses than the officinal preparations and with greater certainty and efficiency, two grains constituting an ordinary dose. A variety of cases will be readily suggested to the physician by the combination, in which it can be used with benefit.

Each fluid ounce contains, calisaya, forty grains; iron, eight grains; citrate bismuth, eight grains.

Dose, one to two drams.

Calisaya, Iron and Strychnia, Elixir of

The combination of strychnia with the valuable properties of the other articles possesses the advantage of a larger adaptation to those cases of general debility complicated with nervous difficulties, as well as to cases attended with constipation, &c. Strychnia, by its peristaltic action on the muscular coating of the alimentary tube, overcomes torpidity of the bowels, while iron enriches the impoverished blood with red corpuscles, and together with calisaya, gives increased tone and vitality to the system generally.

Each fluid dram contains one-hundreth of a grain of strychnia.

Dose, one to two drams.

Cantharidal Acetic Rubefacient.

A convenient and efficient instrument to produce counter-irritation when it is desired to occasion merely redness or inflammation of the skin. Offered as a substitute for the ordinary irritants, such as mustard.

Cantharidal Acetic Vesicant.

An energetic and reliable epispatic. On account of the facility of application, certainty of effect, and slightrness of pain, no agent is equal to cantharides for causing vesication when applied to the skin. Applicable to those conditions when it is desirable to substitute a mild and easily managed disease for an internal and intractable one; when a desiderative influence is required, and the absorbents, the circulation and the whole system need stimulation and increased vigor by external means. It is recommended to physicians as the most prompt blistering article in use.

Cantharidal Collodion.

"It produces a blister in about the same time as the ordinary cerate, and has the advantages that it is applied with greater facility, is better adapted to cover uneven surfaces, and retains its place with more certainty." On application, evaporation of the ether takes place in less than a minute, and it may then be re-applied if necessary.

Cerium, Oxalate of.

Nervine tonic and sedative. Prof. Simpson, of Edinburgh, speaks of it as almost a specific in chorea. It has been extravagantly lauded in chronic vomiting, and that attendant on phthisis, hysteria, pyrosis, and atonic dyspepsia; while in the vomiting of pregnancy it has been found more successful than any other remedy. Dr. Waring speaks of its therapeutic uses as follows: "In chronic intestinal eruptions, a peculiar and intractable form of disease for which arsenic and nitrate of silver are generally prescribed, Dr. Simpson employed the salt of cerium with marked advantage. In irritable dyspepsia, attended with gastralgia, pyrosis and chronic vomiting, its exhibition was attended with satisfactory results. In the vomiting of pregnancy it affords prompt

relief. Further testimony in favor of the oxalate, especially the latter condition, is adduced by Dr. C. Lee. It seems well worthy of further trials.

"In epilepsy, chorea, and other allied convulsive diseases in which the nitrate of silver is generally employed, it deserves a trial; for as Prof. Simpson remarks, it is certainly attended with this advantage, that at the same time it acts as a sedative and tonic, its use may be persevered in without any fear of discoloration of the skin."

Dose, one grain two or three times daily, dissolved in water.

Chloroform.

When equal volumes of pure chloroform and colorless sulphuric acid are shaken together in a glass stoppered bottle, there should be no color imparted to either liquid or but a faint tinge of color imparted to the acid after twelve hours standing—neither should there be any heat sensible to the hand developed at the time of mixing. Chloroform, as it evaporates from bibulous paper, should give out little foreign odor, and that only as the last portion is passing off. Chloroform should not be used for inhalation without having been subjected to these tests. No other should be used for inhalation.

Collodion Surgical.

Useful in wounds to keep the edges together. It forms also, a coating, and has been applied in abrasions and burns. In operative surgery it has been employed with remarkable success to hasten the process of healing by the first intention.

Ether, Chloric.

(Concentrated, Chemically Pure.)

This preparation is a mixture of equal parts by weight of chemically pure chloroform and pure deodorized alcohol. The alcohol acts as a corrigent against depressing effects.

Ether, Compound Spirits of.

(Hoffman's Anodyne.)

This article is strictly officinal, it contains the officinal propor-

tion of ethereal oil. The commercial article contains a variable proportion of ethereal oil. It possesses a wide range in therapeutics. "Hoffman's Anodyne," remarks Pereira, "possesses the stimulating powers of ether with anodyne properties. It is a very useful remedy in cases of general unrest, inability to sleep, &c., depending on nervous irritation from pain, weakness, or other causes. Given in combination with morphia, it aids it and appears to prevent some of its unpleasant effects. Hoffman's Anodyne is also very useful as a carminative, probably exceeding in this respect any of the aromatics. In cases of flatulence, depending upon nervous disturbance (hysteria, &c.) it is especially useful."

Dr. Waring speaks of its utility in spasmodic affections of the bowels, in typhus and other low fevers, and in spasmodic asthma in combination with *opium* or *henbane*, adding: "In earache, exposing the ear to the fumes of spts. ether is often attended with great relief. It may be effected by mixing equal parts of the spirits and hot water in a vial and applying its aperture to the external ear. Hiccough is often immediately arrested by xx-xxx minims of spts. ether in drs. x of some aromatic water.

Dose, one-half to one fluid dram in sweetened water.

Ether, Sulphuric.

(Chemically Pure, Concentrated.)

It has been used by many surgeons as an anæsthetic, and by them pronounced to be entirely pure. Its employment in medicine is the same as that of chloroform and anæsthetics.

Ether, Spirits of Nitrous.

(Chemically Pure)

Sweet Spirits of Nitre should be carefully excluded from the light and air, and when in dispensing, it becomes acid, so as to effervesce with a solid particle of bicarbonate of potassa or ammonia, a crystal of either salt should be put in the bottle with it. It is better not to be long kept as it becomes acid by age.

It possesses diuretic, diaphoretic and anti-spasmodic virtues. It is much esteemed as a medicine in febrile affections, and extensively employed either alone or in conjunction with other agents for the purpose of promoting the secretions, especially of the skin and kidneys.

Dose, one-half to a fluid dram.

Gentian with Chloride of Iron, Elixir of.

Agreeable tonic, hæmatinic, and alterative. The chloride of iron is one of the most active and certain of the preparations of iron, and usually acceptable to the stomach. It is supposed to be diuretic and to have a peculiar influence on the urinary passage. Gentian occasionally produces laxative effects, gives tone to the digestion, improves the appetite, and strengthens the constitution. By this combination, we have a remedy of great utility in atonic dyspepsia, in diseases accompanied by debility, in scrofula, in passive hemorrhages from the uterus, kidneys and bladder, in old cases of gleet, gonorrhoea and leucorrhoea when the discharges have prostrated the system. It has been found beneficial in erysipelas, scarlatina, diphtheria, and in purulent infection of the blood. In these cases it is supposed to act by way of improving the condition of the blood.

In Bright's diseases this elixir is a very useful remedy, acting as a chalybeate, astringent and diuretic, diminishing the amount of albumen and increasing the flow of urine.

Each fluid ounce contains four grains sesqui-chloride of iron, and twenty-eight grains of gentian.

Dose one dram.

Glycerine

This article is deodorized, colorless, and equal in purity to any similar article in market. Its uses are obvious.

Glycerole Hypophosphites.

Glycerole hypophosphites are a combination of glycerin with the hypophosphites. Peculiarly applicable to pulmonary degeneration and anæmic conditions of children.

Gutta Percha Solution.

Beneficial as a protective covering for compound fractures, open cancers, suppurating gangrenous surfaces, burns, abrasions, wounds, &c. May be applied by a brush or by pouring. A delicate film is left by evaporation of the liquid, which completely excludes the air and acts as an artificial cuticle. Has been topically employed with advantage in various cutaneous affections, scrofulous and indolent ulcers, and as an ectrotic in smallpox.

Gutta Percha Vesicant.

The most acceptable, certain and painless vesicant in use. Can be applied with facility, is adapted to cover uneven surfaces, and retains its place and form without spreading.

Hypophosphites.

Lime; Soda; Potassa; Iron; Manganese; Ammonia.

These salts are recommended as eminently serviceable in the treatment of phthisis. Their efficacy is supposed to depend on the phosphorus imparted to the system. Dr. Churchill, of Paris, has prescribed them in pulmonary tuberculosis with satisfactory results. But their utility does not appear to be limited to this disease.

The pathology of many diseases which have their origin in the nerves would indicate a diminution of the phosphoric principle and demand these remedies. They appear to be the indicated agents in that class of maladies characterized by a want of nervous tone, and in some types of mental aberrance they prove the desideratum. In many cases of defective osseous formation and impairment of the vital power of the whole system these remedies may be employed.

Phosphorus constitutes an important element in the human economy. It is found in the brain, nerves, blood, tissues, &c., and when there exists a deficient quantity morbid symptoms are induced, which can be discussed only by re-supplying the system. The hypophosphites are now acknowledged the most direct medium of accomplishing this purpose.

Dose, ten to twenty grains, each.

Hypophosphites, Syrup of

Compounded of Lime, Soda, Potassa and Iron.

The object of this syrup is to meet the demands of many complicated diseases, which will succumb to no single remedy, but which require both the phosphoric, iron, and the alterative treatment. Its medical employment appears to be preëminently suitable to some anæmic conditions, conjoined with certain types of low nervous vigor; in a few cases where the system is known as "run down," a debilitated condition to which it is often difficult to give a name, and it is regarded as particularly beneficial in debility from prolonged lactation. Mr. Taylor used the hypophosphites with much success in catarrhal and leucorrhœal discharges, neural-

gia and muscular pains, simulating inflammation. The deficiency of phosphate of lime occasionally brings on fever of dentition, and in this Mr. Taylor employed them with marked success. The iron element renders this syrup peculiarly applicable to weakly, ill-fed children, or atonic cases generally.

Dose, one fluid dram three times a day.

Hypophosphites, Syrup of

Lime and Soda,—Churchill's.

The Boston Medical and Surgical Journal, vol. 55, sums up the views of Dr. Churchill concerning this remedy in the following words:—

"According to Dr. Churchill, the immediate cause, or at least, an essential condition of the tuberculous diathesis is a diminution in the economy of the amount of phosphorus existing in a state capable of oxygenation. The specific remedy for the disease consists in the employment of some preparation of phosphorus which offers the double condition of being immediately assimilable, and, at the same time, of being in the least possible degree of oxygenation. The hypophosphites of soda and lime are the preparations which appear to best unite these two conditions.

"These salts may be administered indifferently, in doses varying from two to forty-five grains daily. The maximum dose usually employed by Dr. Churchill is fifteen grains daily for adults. According to him they have an immediate action on the tuberculous diathesis, causing all the general symptoms to disappear with a rapidity truly marvellous. When the morbid deposit is recent, when softening has only just begun, or is not rapid in its progress, the tubercles are absorbed and disappear without leaving a trace. If the disease is of longer standing, and the softening has considerably advanced, it sometimes continues in spite of the treatment, and the issue of the disease depends upon the anatomical condition of the lesion, upon its extent, and especially upon the presence or absence of complications.

"Mr. Churchill thinks that the hypophosphites act in two ways; on the one hand, they reinforce the principle, whatever it be, constituting the nervous power; on the other, they are essentially blood-generating in their nature, far surpassing, in this respect, every thing hitherto known. They possess in a high degree all the therapeutic effects attributed, by former observers to phosphorus, without any of the dangers which have caused that substance to fall into neglect.

"The number of cases of phthisis treated by Mr. Churchill amounts to 35, all of which were in the second or third stage

that is, with tubercles in the process of softening, or with cavities, of this number 9 have been completely cured, in 8 of which the physical signs have disappeared, in 11 cases there was great improvement, and 14 have died. One is still under treatment."

Dose, one to three fluid drams.

Hypophosphite of Iron, Syrup of

Alterative, tonic and blood-restorer. Phosphorus alone has acquired a reputation in chronic convulsive disorders, and in the treatment of epilepsy. Given in small doses it is said to excite the nervous, vascular, and secretory organs; to increase the fullness and frequency of the pulse, to augment the temperature, to heighten the mental faculties and the muscular powers &c. These are some of the results which are produced by phosphorus; then by combining with it iron, we have a valuable remedy for most cases of anæmia. The syrup of the hypophosphite of iron is an excellent medicine in most cases when a blood-restorer is indicated.

Most cases of debility requiring tonics, alteratives, or hæmatinics will respond favorably to its use. The peculiar advantage derived from the hypophosphite of iron above other ferruginous preparations, is that it meets most favorably the requirements of the economy when there exists a deficiency of phosphorus that should normally be found in the blood, tissues, &c., accompanied with great prostration and languor. It presents the system phosphorus both in an assimilable and oxidizable form, and at the same time subjects it to the toning influence of a chalybeate.

Each fluid dram contains one grain of hypophosphite of iron.

Dose, one to four drams, three times a day.

Hypophosphite of Iron and Manganese

Syrup of

Many physicians consider this combination a remedy superior to iron in cases where this metal is indicated. Dr. Speer, of Edinburgh, introduced these two agents, to the profession, in the form of saccharated carbonates, and extravagantly praised the remedial utility of the product, claiming as advantages absence from the constipating tendency of some ferruginous preparations, and an action more satisfactory than either agent alone is capable of effecting. His opinion has since been confirmed by a large number of practitioners and is supported by testimony too strong to be shaken.

. This new preparation combines these same advantages and many more which have already been enumerated under the head of hypophosphites. The wide range of diseases to which it is eminently adapted is so obvious, that an enumeration of the legion is deemed unnecessary.

In an editorial of the *North American Medical Reporter*, May, 1859, the writer discoursing on the medicinal value of manganese, says:—

“The functions of the *glandular system*, as well as the *lymphatic* are at fault in consumption, arising from whatever cause, and hence the necessity of agents capable of influencing the functions; otherwise, the albumen, which is the true starting-point of all animal tissues, will not be appropriated, and a regular course of starvation which constitutes true consumption will ensue.

“It is for this reason that manganese is so important an agent in the treatment of consumption. In its action, manganese stimulates the glandular system, and quickens the functions of the lymphatics and lacteals. Hence, in our opinion, the hypophosphite of manganese is preferable to any other of the hypophosphites, in the treatment of phthisis and tuberculosis.”

What laudations are pronounced upon manganese in the treatment of this disease may with equally potent authority be pronounced upon a combination of manganese and iron, for the latter agent has long been considered beneficial in this complaint. Dose, one dram, three times a day.

Hypophosphite of Iron and Quinia, Syrup of

The hypophosphites have within a few years been brought into notoriety as a remedy in tuberculosis, scrofulous diseases, rickets, &c., and have been recommended as a valuable medicine in many cases of debility. By the combination of iron and quinia, we have a remedy, which acts promptly on the system as a stimulant tonic, regenerator of nervous force and integrity.

In fatty degeneration of the brain, this agent will often be found useful as an adjuvant with other remedies. We know of no specific in phthisis, yet we can recommend this syrup as a valuable agent in cases where tonics and stimulants are indicated; often the appetite will be improved by its use, the digestive functions also, and the strength of the patient increased while this article is being used; if thought important, the cod-liver oil may be administered morning and evening.

Frequently this remedy will be found serviceable in the treatment of debility consequent upon typhoid fevers and other diseases. In some stages of intermittent and remittent fevers, this

combination can be used with advantage. The value of this agent will be held in high estimation by the medical profession when the wide range of its adaption to the treatment of disease shall have been fully tested. Dose, one to two drams three times a day.

Iodoform.

Iodoform is volatile, insoluble in water, soluble in alcohol and ether, and has a very large proportion of iodine. Its therapeutic uses are analogous to those of iodine and the iodides, over which it has the advantage of being *less irritant, more readily absorbed and assimilated*. In small medicinal doses, iodoform appears to possess a union of tonic, stimulant and alterative properties, exercising at the same time a remarkable influence on the nervous system. Various forms of scrofula, rachitis, syphilis, bronchocele, amenorrhoea, obstinate skin diseases, such as lepra, psoriasis, and chronic eczema, &c., have been benefited by its use. Much testimony could be adduced relative to its utility in scrofulous enlargements of the glands, goitre, and neuralgic affections.

Dose, one to three grains.

IRON.

The preparations of iron are pre-eminently tonic, and peculiarly well fitted to improve the quality of the blood when impoverished from any cause. Hence they are used in diseases characterized by debility, especially when the consequences of inordinate discharges. The diseases in which they are most usually employed are chlorosis, hysteria, fluor albus, gleet, rickets, chorea, and all passive hemorrhages. M. Coster's observations demonstrate its efficacy in preventing the development of tubercular diseases, while Dr. Lees of Dublin, has prescribed ferruginous preparations in chronic forms of albuminuria with the happiest results. The anæmic aspect of patients, generally, suffering from albuminuria points out an intimate relation with an impoverished condition of the blood, a symptom which is acknowledged best combated by chalybeates. There are several forms of menstrual derangements in which iron displays specific virtues, the most simple of which are menstrual hemorrhage and anæmia. In torpor of the uterine system, iron, in combination with aloetic laxatives is potent to stimulate and strengthen the functions of the economy.

There is no one article in the *Materia Medica*, which is of more unquestionable efficacy, possesses a wider adaptation to diseases

and none that is offered to the practitioner under so extended a variety of preparations. The therapeutical value or utility of the several varieties depends on the manner in which they are received by the stomach, the readiness with which they are attacked by the gastric acids, and the base absorbed by the system.

Contra-indications.—Vascular excitement, plethora, congestion and inflammation.

ELIXIRS OF IRON.

Iron and Quinia, Elixir of Phosphate of

This is a valuable chalybeate and tonic, and constitutes a convenient and agreeable form in which to administer phosphorus iron and quinia. The indications which it is capable of fulfilling are numerous. It is eminently applicable to all atonic conditions of the system. In debility from protracted diseases, exhausting discharges, anæmia, and in the legionic forms in which the neuroses are developed, this combination of tonics recommends itself. More especially is it fitted to combat "ordinary nervousness" occurring in persons of an exsanguine temperament.

Structural changes and functional derangements are often traceable directly back to a want which the organism experiences for phosphorus and iron, and in this combination are found the very agents needed to restore to the system its equilibrium of power, and normal harmony of action of the several visci.

Besides the recuperative influence of phosphorus and iron, we have the toning influence of quinia. In promoting the appetite quinia indirectly though effectively furnishes the absorbent with material wherewith to repair the forces of nature, thus facilitating and expediting the action of the former.

In senile gangrene, and in convalescence from disease, this elixir is confidently recommended, &c.

Dose, one fluid dram.

Iron, Elixir of Protoxide of

The several preparations of iron operate as a tonic; they elevate the pulse, heighten the complexion, and promote the secretions, and are most useful when there is debility, relaxation and languid circulation. The most desirable is that which is most easily assimilable and most acceptable and pleasant to the patients.—The protoxide, to fulfill these conditions, is receiving high recom-

mendations, and daily securing a stronger hold on the confidence of the profession as a remedial agency of superior efficacy in ordinary cases of prostration and disordered life. It is the form of iron containing the least of oxygen. The proneness of the protoxide to absorb oxygen and to pass into a sesquioxide state is partially counteracted by this combination, though the chemical affinity is weak, and when once the elixir is introduced into the system and subjected to its modifying influences, decomposition readily takes place and the protoxide freed and readily assimilated. It is reliable, pleasant, and very free from any disagreeable taste. It is a conceded fact that vegetable tonics materially aid the operations of iron, and in the elixir we have this adjuvant. This preparation supplies promptly to the blood and capillaries the coloring matter necessary to give what is termed good red blood. It is prescribed for chlorotic anæmia, scrofula, chorea, atonic dyspepsia, and physicians, who have used it, attest its promptness of action.

Each fluid dram contains five grains of iron.

Dose, one dram.

Iron and Quinia, Elixir of Protoxide of

This preparation combines all the tonic properties of the iron, with the tonic and antiperiodic properties of quinine, and is admirably adapted for children and delicate females, and is adapted to most cases where iron would be used. Each fluid dram contains one-fourth grain of quinia, and five grains of iron.

Dose, one dram.

Iron, Elixir of Pyrophosphate of

The tastelessness and elegant appearance of this elixir give it the preference in cases of children and persons of a delicate nervous organization particularly females, who require hæmatinics but cannot take them as ordinarily prepared without experiencing unpleasant effects. The therapeutical value is more fully exhibited under head of *Iron Citro-Ammoniacal Pyro-Phosphate of*.

Each fluid ounce contains sixteen grains of the iron.

Dose, one to two drams.

Iron and Soda, Elixir of Pyrophosphate of

Chalybeate and alterative. A marked peculiarity of the pyrophosphate is, that it will scarcely ever, in any case, disagree. The tastelessness and elegant appearance of this medicine, eminently adapt it to a numerous class of debilities, and to subjects of a ner-

vous delicate organization. Instances can be multiplied in the practice of any physician, where the combined influence of iron, phosphorus and sodium are indicated.

Each fluid ounce contains ten grains of pyrophosphate of iron ; fifteen grains pyrophosphate of soda.

Dose, one to two drams.

SALTS OF IRON.

Iron, Ammonio-Citrate of

Tonic and hæmatinic, possessing aromatic and carminative properties. It is especially fitted for children, and those states of the stomach too irritable to tolerate the more powerful salts.— Agreeableness of taste and odor and the degree of freedom from astringency it possesses, together with extremely mild and soothing qualities, constitute the great recommendation for its use. Dr. Waring pronounces it the most preferable of all the mild salts of iron, while Dr. Stillé merely calls it inferior to the tartrate. Among its principal therapeutical uses are exhaustion consequent on protracted diseases, anæmia and scrofulous states of children and dyspepsia occurring in scrofulous subjects. It may be given in doses of five grains.

Iron, Ammonio-Tartrate of

(Scales)

Mild and unirritating tonic. This substance has a sweetish and not unpleasant taste, and is soluble in water.

Dose ten to thirty grains.

Iron and Potash, Tartrate of

Tonic and diuretic. In phagedenic chancres, *phthisis*, and atonic states generally of the system it is recommended, while against worms it is found to act particularly favorably, as a corroborant anthelmintic in women and children. In its effects and use it resembles the ammonio-citrate.

Dose ten to thirty grains.

Iron and Manganese, Citrate of

Blood-restorative, tonic, and anti-anæmic. It is applicable to

that class of diseases, where a depurator of the blood, and powerful tonic are needed. Manganese promotes the promptness of action and the hæmatinic influence of the iron element.

Dose five to ten grains.

Iron and Quinine, Citrate of

The medicinal properties and action are defined by Dr. Waring as follows: "Blood restorative, tonic and anti-periodic. It possesses the properties of both iron and quinine and is admirably adapted for children and delicate females, being easily borne when the stronger salts are inadmissible." The state in which these drugs exist in this preparation, is a commixture rather than a chemical combination and possesses no intrinsic value superior to an extemporaneous union of the medicines. The therapeutic uses of the two drugs are varied and are discussed under the appropriate heads, a knowledge of which will lead to the determination of what conditions demand this combination. Dose, five to ten grains.

Iron, Quinia and Strychnia, Citrate of

Hæmatinic, chalybeate, and nervine-stimulant. Beneficial results have followed the use of this combination in atonic dyspepsia, some types of paralysis, chorea, amenorrhea, incontinence of feces and urine, generally in cases of nervous and physical degeneration.

Dose, three to six grains.

Iron and Strychnia, Citrate of

Blood-restorative, tonic and nervine stimulant. The morbidly irregular action of the nervous system is very often traceable primarily to impairment or deterioration of the blood by the diminution of red globules, and to meet the demand of many of these diseased manifestations, there is no more efficacious agent than the citrate of iron and strychnia. It has been successfully employed in some forms of paresis, chorea and amenorrhea. Cases of atonic dyspepsia are recorded as having yielded promptly to this agent. When the pathology of incontinence of urine or fecal matter is physical degeneration, this combination may be found beneficial. Strychnia, operating through the medium of the spinal marrow, produces rigidity of the sphincter ani and sphincter vesicæ, temporarily overcoming the impaired muscular power and

affording relief, while iron, together with the toning influence of strychnia, combats atony, regenerates the system, and establishes a radical cure. Many diseases are treated in vain, because the aphorism, *sanguis moderator nervorum*, is lost sight of entirely in their management. It combines one part of strychnia to one hundred of citrate of iron. Dose, three to six grains.

Iron, Hydrocyanate of

Like the many other preparations of the ferruginous type, hydrocyanate of iron appears capable to subserve quite a number of indications, though its predominant value is exhibited in the treatment of epilepsy. Professor D. L. McGugin, of the Iowa Medical College, regarded it a superior remedy to combat epilepsy. In the following letter the Dr. refers to its history and gives his opinion of its utility based on actual experience.

KEOKUK, IOWA, July 28, 1858.

MESSRS. TILDEN & Co:—

I am quite obliged to you for the small package of the "Hydrocyanate of Iron" which you so promptly prepared for and forwarded to me, and also for the obliging promise to prepare more.

I have now an interesting case in the person of a young lady who is now under its use. It was received so recently that time has not been afforded for a trial of its benefits.

In 1854 an article appeared in the French journals, translated and published in the journals of this country, giving an account of the use of the above preparation of iron, which was truly gratifying in the results from its use. M. Roux, one of the members of the faculty of the Medical Institution at Montpellier, treated six cases, all of which trials were successful. Another reported cases which resulted as happily, although one of them was a case of long standing advanced in life, and the convulsive movements frequent and severe.

A case presented itself possessing unusual interest, being that of a young man, an only son, very intelligent and of much promise, intellectually and morally, but as he had been under treatment for some time, his condition was not in the least improved.

I determined upon a trial of the Hydrocyanate of Iron, as it was a case which seemed to demand such a combination or such a remedy. After spending much time in the search of the article, I failed to procure it, when Prof. Procter, of Philadelphia, was applied to, who kindly forwarded me a dram of it. This I used in this case, and after using it for two months the convulsions subsided, and did not reappear for many months, during which time,

notwithstanding I had written in all directions, I was not able to procure more of the drug until your chemist favored me with a small parcel which I am now employing as above stated.

During the period employed in the use of the remedy he expressed a decided change in his feelings, for instead of the despondency and gloom which had previously weighed him down, he was now sprightly and hopeful. The dread of the return of the paroxysms had been measurably dispelled, and he looked forward with confidence to an ultimate and permanent recovery. I believe that could he have continued the use of the remedy, these fond hopes, in which his family and friends largely participated, would have been realized. Although the epileptic spasms have returned, they are not so frequent, nor are they so severe. It is for his case that I desire more of the drug which you have kindly promised me, but I have beside a few other cases in which I would be gratified in being able to use it.

Shortly after the article had been expended in this case, I called the attention of the medical public to it in the Iowa Medical Journal, of which I was at that time one of the editors,—in volume 2d, No. 2, 1854-55,—in the hope that it would arrest the attention of my medical brethren, and that a further trial would be made of it, as this was manifestly the first case reported in which it had been used in the United States. It may have been tried, but if so, it has not been reported in any of the journals of this country, as I have searched every one carefully from that time to the present.

I would be gratified to learn that others had prescribed it in a disease so formidable in its character, and one too which awakens so much solicitude, on the part of the patient himself, and by the family and friends, towards one who is unfortunate enough to be afflicted with it. As I have been recently written to on the subject, inquiring in relation to the mode of using it, and that others may be tempted to try it, I subjoin the formula:

R. Hydrocyanate Ferri,	3 j.
Pulv. Valerian,	3 ij.
M. ft. pil. No. 120.	

Sig. One night and morning.

Each pill contains half-grain of the hyd. ferri, and one grain of the powdered valerian. The dose may be gradually increased, so that at the end of three months eight grains of the medicine may be taken daily. The longest term requiring the use of the drug was one year, but at the end of that time the paroxysms had disappeared entirely. Other cases yielded to four, six, and nine months' use.

Yours, &c.,

D. L. MCGUGIN.

Besides being especially recommended in *epilepsy*, and successfully used when other preparations of iron and nitrate of silver

had failed, it has been recommended and used with success in chorea, neuralgia, and other severe nervous affections. M. M. Dupay and Jolly used it in the following form, in neuralgia.

R. Hydrocyanate Iron,	18 grains.
Sulph. Quinine,	12 "
Ext. Opium,	1 "
Conserve Roses,	q. s.

Make 12 pills. Take one every two or three hours.

This gives one and a half grains of iron to each pill. A medical writer suggests the following change:

R. Hydrocyanate Iron,	18 grains.
Sulph. Quinine,	12 "
Ext. Opium Aqueous,	1 "
Ext. Valerian alc.,	5 "

Make 18 pills. Take one every two or three hours, increasing according to the indications of the case.

Its therapeutical utility in epilepsy is still further attested by Dr. G. S. Bailey, a retired physician of Iowa, in a letter to the editors of the *Journal of Materia Medica*, in which he states his only son, after having been medicated for this malady with all the remedies that medical skill could suggest, for more than six years without success, was finally cured with the hydrocyanate of iron, by Dr. McGugin.

M. Fabre, (*Revue de Malgaigne*, March, 1853, p. 139), makes mention of seven cases of well-marked epilepsy, in which cures were effected by pills of this substance. Corroborative of his views of its potency, he adduces the testimony of "M. Roux, of Brignolles, who reports several successful cases; also of Dr. Dila-siauve, physician to the Bicetre, and other physicians." He claims for it a powerful influence over the functions of the uterus, and says it has succeeded in some menstrual disorders after other chalybeates had failed him.

Iron by Hydrogen.

(Quevenne's)

According to Quevenne, iron by hydrogen introduces more iron into the gastric juice than any other chalybeate. It is chiefly employed in anæmia, chlorosis, amenorrhea, and chorea.

Dose three to six grains.

Iron, Iodide of

Tonic, emmenagogue, and absorbent. It appears to be particu-

larly adapted for constitutions of a strumous dyscrasia. Large doses are apt to create nausea and unpleasant gastric disturbance, while five to eight grain doses are pronounced safe and reliable.—Notwithstanding the issues of good authorities in regard to its therapeutic operation, it is generally believed that when the compound is taken into the stomach, the system receives the combined effect of the two elementary constituents, and though the iodine be rejected, it is not so in such a degree as to interfere with its special therapeutic operations, and for *this reason* a peculiar remedial influence is attributed to the iodide.

It may be employed in many cases of anæmia associated with phthisis, glandular enlargements and strumous manifestations generally, especially when occurring in debilitated and emaciated subjects. One-half to one dram of the syrup is recommended by Dr. Waring as very efficacious in scrofulous cases of amenorrhea and dysmenorrhea; he cites the favorable testimony of Drs. Turnbull, Williams, Thompson, and Ranking in regard to its use in these complaints. Dr. W. says the iodide of iron has been known to effect a permanent cure of *albuminuria*, in a subject of "broken down" constitution. Among the other purposes for which it may be used are, phthisis, chlorosis, diabetes, secondary syphilis, organic diseases of the uterus, chronic affections of the liver, &c. Dose, generally prescribed is from one to eight grains.

Incompatibles.—Acids, alkalies and their carbonates, most metallic salts, vegetable astringents, &c.

Iron, Lactate of

Mild chalybeate, possessing the general properties and medicinal utility of other ferruginous preparations. Some physicians claim for it the superiority, on the ground that the lactic acid is the one that attacks the metal when it has been introduced into the human economy. By others it has been designated as peculiarly fitted to overcome amenorrhea and dysmenorrhea, and to combat anæmia and chlorosis. In "Dunlison's New Remedies," can be found abundant testimony to prove its efficiency in chlorosis.—Dose, ten to twenty grains daily, in divided doses.

Iron, Persulphate of

(*Monse's Salt*.)

For the therapeutic uses of this salt reduced to a liquid, see *Monse's Solution*.

Iron, Proto-Carbonate of.

(*Vallet's, Mass.*)

Freedom from astringency, unchangeableness, and ready solubility in the acids, are its chief recommendations. It is the best chalybeate that can be employed to produce the alterative effects of iron.

Dose, five to thirty grains daily, in divided quantities.

Iron, Citro-Ammoniacal Pyro-Phosphate of

The preparation of this article is based upon the method of M. G. Robiquet.

It possesses marked advantages over the other preparations of iron, ready assimilation in the system, and an entire absence of any tendency to disorder the stomach or bowels. Persons of a nervous delicate organization, particularly females, who can not tolerate iron in its ordinary forms, generally bear this well, and derive great benefit from its use. The introduction of iron into the economy of some constitutions, far from producing the desired result, interferes with the nutritive and digestive processes, stimulates impoverishment, and occasions gastric disturbances, effects which rarely follow the administration of the pyro-phosphate. Unlike other chalybeates, though morbid action of the system may destroy its utility, it is not so apt to aggravate the disorder, for the amelioration of which it was given. Again, the pyro-phosphoric acid gives to it a value, possessed by no other in the *materia medica*, to combat many conditions in diseases, when the system lacks its phosphoric constituent in a due proportion. It is particularly efficient in an hydræmic state of the circulation. Here the system lacks nerve power, and the stimulating properties of the blood their normal vital activity. Under these conditions the administration of iron in its ordinary forms is attended with little or no benefit. This defective assimilatory power is, to some extent, counteracted by administering wine with iron, but the pyro-phosphate is regarded a superior excitant, hence its lauded utility in cases where persons "have been over-worked by mental application, and prostrated by disquietude and care, or have a shattered nerve-power from some constant source of bodily suffering, have a thousand anomalous symptoms dependent on an imperfectly generated and distributed nerve-power, such as wakefulness, trembling, spasmodic movements, palpitations," &c.

While it is mild and agreeable chalybeate, its action on the system is efficient and it may be administered in any form that may

be desirable, that of pill, solution in water, syrup or elixir. It is very favorably spoken of in the treatment of rickets and diabetes, and has been employed with marked success in anæmic diseases.

Dose, two to three grains.

Iron, Sesqui-Chloride of

This salt is known under the names, *Muriate of Iron*, *Perchloride of Iron*, and the *Sesqui-Chloride of Iron*. It is the most powerful of all the ferruginous preparations. It is deliquescent, and very soluble in water, alcohol, and ether. It may be used for the ordinary purpose of chalybeates. See Tincture Muriate of Iron.

Dose, in quantities according to the severity of the disease, and the age of the patient.

Iron, Tannate of

Chalybeate and tonic. The tannate of iron is eminently useful in chlorosis, and to check exhausting discharges, and is also a popular application to ringworm. Dr. Waring remarks: "In chlorosis, it has been particularly recommended by Dr. Beredetti, who considers it the most efficacious of all the salts of iron, and quotes numerous cases in support of his assertion."

Dose, five to eight grains daily, in divided quantities.

Iron, Valerianate of

Nervo-tonic. It has been employed with benefit in nervous disorders, hysteria, chorea, neuralgia.

Anæmic conditions complicated with irritability, excitability of the nerves have improved under the influence of this salt. Dose one to two grains, repeated several times a day.

SOLUTIONS OF IRON.

Iron. Hydrated Sesqui-Oxide of

This preparation is, without doubt, one of the best antidotes we possess for poisoning by arsenic. If a sufficiently large quantity be added to a solution of arsenious acid, it combines with the

acid, and converts it into subarseniate of protoxide of iron, which is insoluble. In such cases, the hydrated sesquioxide would act as a chemical antidote. Dr. T. R. Beck recommends it to be given every five or ten minutes, or as often as the patient can swallow it, until relief is obtained; adults may take a tablespoonful; children a dessertspoonful. The sooner it is given after the poison has been taken the more prompt and efficacious will be its action. Many cases are on record which attest its eminent value and useful agency.

Iron, Muriate Tincture of

Diuretic, astringent and hæmatinic. It is the most powerful of all the iron compounds, and may be used when chalybeates are required. Dr. O. Reese deems this the most desirable form of iron for intestinal use in hæmaturia, while Dr. G. S. Bird no less highly speaks of its efficacy in chlorosis. This tincture is advised in *albuminuria* and chylous urine. In incontinence of urine of children, three drops, thrice daily, in combination with a tincture of hyoscyamus, have produced the most satisfactory results. And it is recommended as very useful in retention of urine from spasmodic stricture of the urethra, in atonic hemorrhages from the lungs, in profuse perspiration of phthisis, in dyspepsia occurring in scrofulous subjects, in diarrhea during the last stages of fevers, and in severe cases of dysentery. Salutary changes in some forms of anæmia may be confidently looked for from its hæmostatic operation. It appears to be applicable for internal hemorrhages and fluxes generally.

As a styptic there is no remedy in more common use. Trouble-some hemorrhage which oft-times succeeds the extraction of a tooth, is usually checked by one application. It is also very efficient as a caustic when applied to venereal warts, and some physicians depend on it solely to discuss them. Dose, ten to thirty drops, diluted with water.

Iron, Nitrate of

Astringent, and tonic. Properly diluted it has been used as an enema and injection. Dr. Waring makes mention of its therapeutic uses as follows;

"In the diarrhoea of children its efficacy has been established by Mr. Kerr, Prof. Graves and many others. It may be given in doses of a few drops, according to the age of the child, and it may be employed in the form of an enema. (minims x—xij.) It ap-

pears to be a safe and efficient remedy. "In exhausting hæmorrhage, whether from the lungs, stomach, kidneys, or uterus, this preparation is reported to be very efficacious. It requires to be given in large doses, fl. dram ss. to fl. dram."

In chronic bronchitis, diarrhœa, dysentery, gleet, pyrosis, menorrhagia, and all diseases attended with much debility, profuse discharges from the mucous surfaces, and where tonics and astringents are indicated, this remedy has been employed with signal benefit.

Dose, ten to fifteen drops three times a day.

Iron, Persulphate of

(*Monse's Solution*).

Styptic and hæmostatic. It possesses the advantages over other salts in being less irritant and more astringent, and is peculiarly adapted to cases of hemorrhage from surfaces in which it is especially desirable to avoid irritation. Dr. H. H. Toland, of San Francisco, Cal., (*Pacific Medical and Surgical Journal* July, 1858), says, "If applied to a superficial wound as soon as made, not a drop of blood escapes, and no pain results from the application. It acts by producing instantaneous coagulation of the blood, and will be found invaluable in hemorrhage from the mouth, nose and throat, when it is impossible to ligate the vessel, and may be equally efficacious in alarming uterine hemorrhage, either active or passive."

O. C. Gibbs, M. D., of Frewsbury, N. Y., used a combination of persulphate of iron with full doses of opium, with remarkable success in camp diarrhea. Dr. G. administered one or two doses a day, for one or two weeks after the disease was checked, in order to prevent a recurrence. He administered the salt in one to five grain doses. This solution has been recommended as an efficacious styptic in hemorrhage from the stomach and bowels. As an antiperiodic, it has been employed with signal benefit in several cases of intermittent fever, where quinia had failed, and even produced unpleasant effects. Dose, five to fifteen drops.

Iron, Protoxide of

For combination with elixir of bark. For properties see *Iron, Protoxide of, Elixir of*.

Iron, Sesqui-Chloride of

(Strong Solution.)

In extreme anæmia from violent hemorrhage, when an immediate and powerful hematinic is required, this preparation is eminently useful. Besides possessing the general properties of iron, and being useful as an internal remedy, it also is valuable as a local application, wherein consists its principal use as a styptic in cases of hæmorrhage from superficial wounds, bruises, and as a caustic to warts

SYRUPS OF IRON.

Iron, Syrup of Citrate of

A mild chalybeate.

In ordinary cases of debility requiring a ferruginous tonic, especially where the stomach is irritable, and also in the various strumous affections of children, this syrup is recommended as a highly beneficial medicine.

Each fluid dram contains five grains of citrate of iron.

Dose, one-half to one dram.

Iron and Quinia, Syrup of Citrate of

This syrup combines the effects of iron and quinia. It is especially adapted to children and delicate females.

Each fluid dram contains two grains of citrate of iron, and one-half grain of citrate of quinia.

Dose, one-half to one dram.

Iron and Strychnia, Syrup of Citrate of

Agreeable tonic, blood restorative and nervine-stimulant, possessing the combined properties of iron and strychnia. It has been successfully employed in atonic cases of dyspepsia, constipation, and in some forms of paralysis, amenorrhœa, and chorea.

Each fluid dram contains four grains of citrate of iron, and one-hundredth of a grain of strychnia.

Dose, one-half to one dram.

Iron, Syrup of Iodide of.

This combination is particularly adapted for persons of a scrofulous diathesis. Prof. S. R. Percy, discoursing on its virtues in a lecture communicated to the *American Medical Times*, January 4, 1862, says:—

"It is more used in the diseases of children than in those of adults. The scrofulous diseases of children, which are always accompanied with an anæmic condition of the system, are more successfully treated with this article than with any other in the materia medica. I have found that when the syrup is judiciously given in small doses of one to three drops, to scrofulous and anæmic children, it can be tolerated for a long time, and will continue to be of great benefit for several weeks, without the necessity of suspending its use for a day. Children, with this small dose repeated three or four times a day, will improve rapidly and steadily, when they will not do so well if the dose is increased. In the one instance the iron is all taken up in the system, and only passed off in the usual metamorphosis of tissue, and the iodine exerts its peculiar action upon the glandular absorbents, but in the other instance the salt is presented in larger quantities than are required for the immediate metamorphoses, and it is passed off to some extent undecomposed, and irritates both stomach and kidneys.

"In nearly every form of scrofulous disease, the syrup of the iodide of iron will be found of great service; for in all of these diseases you find glandular enlargements, which are benefited by iodine, and anæmia which is relieved by iron. I have treated children with tubercular enlargements of the mesenteric glands with this remedy alone, when at first sight a cure would seem to be almost impossible, and when a change of air and diet could not be provided. In diseases of this description, I prefer if possible, to give the remedy in small and very frequently repeated doses, as one drop every hour."

Dr. Waring observes: "*In scrofulous enlargements of the lymphatic glands in the tabes mesenterica and other forms of scrofula*, attended with debility and emaciation, the iodide of iron, in the form of syrup, is a powerful and efficacious remedy. It improves the general health, and at the same time, causes marked reduction in the size of enlarged glands."

A more extended notice of the therapeutical uses, for which it is evidently adapted may be found under *Iron, Iodide of*. Dose, 20 to 40 drops, diluted with water.

Iron and Manganese, Syrup of Iodide of.

Tonic and alterative. In simple anæmia, resulting from obsti-

nate intermittent fevers, prolonged suppuration, scrofulous, syphilitic and cancerous affections, this syrup acts beneficially and rapidly, and permanent effects may be expected. Manganese, itself, closely resembles iron in its properties and the above preparation is eminently applicable to that class of diseases where a depurator of the blood, a powerful tonic and active alterative are indicated. Chlorosis, syphilis, scrofula, and many diseases of the skin, &c., are benefited by it. It possesses all the properties of the preceding syrup, together with those of manganese, a remedy lauded in combination with iron, on the ground that it promotes the promptness of action of the latter and enhances its hæmatinic influence. In it (manganese) iodide of iron may also receive an adjuvant. Manganese is generally conceded to exert a peculiar therapeutical influence over the elements with which it combines, aside from that which belongs to it intrinsically.

Dose, ten to thirty drops.

Iron, Quinia and Strychnia, Syrup of Phosphate of.

Highly esteemed as a chalybeate, tonic and nervine stimulant Uses of this combination will readily be suggested.

Each fluid dram contains phosphate of iron, one grain, of quinia, one grain, of strychnia, $\frac{1}{2}$ grain.

Dose, one to two drams.

Iron, with Iodide Potass., Syrup of Protoxide of.

In this preparation are combined a mild but efficacious chalybeate and valuable alterative. In cases of goitre, strumous enlargement of the glands, strumous ophthalmia, leucorrhœa, mercurial cachexia, and all tubercular affections, chronic hydrocephalus, syphilis and syphilitic affections, gout, rheumatism, arthritic enlargements, asthma, cutaneous diseases, and in many other diseases which a knowledge of the properties of its elementary constituents will readily suggest, this compound will prove eminently serviceable, enriching the blood, improving the digestion and invigorating the system generally. It may be employed in all atonic conditions, where the iodide of potassium is indicated. The medicinal property and action of the Iodide of Potassium are closely analogous to those of iodine, the value of which, as an alterative, is well known. It is preferred by some on the ground, that the system sometimes responds more favorably to it than to iodine alone.

Dose, one-half to one dram.

Iron, Syrup of Pyrophosphate of

For a statement of the remedial advantages of this chalybeate, See *Iron, Citro-ammoniacal Pyrophosphate of*. This syrup, is pleasant to the taste and is more readily taken by a class of patients than the crystals or the elixir even.

Dose, one dram.

Iron with Quinia, Syrup of Protoxide of

Tonic and febrifuge. See iron, protoxide of and quinia for their respective value as medicines. This combination may be administered with much confidence and assurance of success, in febrile relapses, dyspepsia, inertia or atony of the several organs of the body, general debility, convalescence from acute and chronic exhausting diseases, some types of neuralgia, every disease characterized by periodicity and all conditions of the system when quinine is suggested and yet a chalybeate is needed.

Dose, one to two drams.

Iron, Rhei and Columbo, Syrup of Protoxide of

A valuable remedy in indigestion. This syrup has been universally commended by all who have given it a fair trial, and is pronounced a medicine superior to any other similar preparation. Experience proves its efficacy to combat dyspepsia and the long list of symptoms distinctly referable to a fit of indigestion, such as impairment of the appetite, furred tongue, pain in the frontal region of the head, undefined distress in the neighborhood of the stomach, regurgitation of bile, constipation, febrile movements, sallow appearance of the countenance, &c. For in combining a tonic, chalybeate and laxative, it contains the medicines essential for the readjustment of digestion, and the establishment of a radical cure.

Each fluid ounce contains iron, sixteen grains, rhubarb, and columbo, each five grains.

Dose, one to two drams at each meal.

Iron, Syrup of Superphosphate of

Tonic, deobstruent, and hæmatinic. This combination will be found of service in most cases of anæmia and may be used for the same purpose as other hæmatinics. It is recommended upon good authority as beneficial in the treatment of diabetes. In the

treatment of rickets, this agent deserves consideration, combining, as it does, two essential elements, necessary to build up the healthy organization of the system.

There might be mentioned numerous instances in which this salt will be found advantageous. As an alterative and blood-restorer, it will relieve many uterine difficulties, hepatic affections, scrofulous diseases, and renal troubles. Most of that catalogue of diseases, which are frequently denominated those of debility, will respond favorably to the judicious use of this agent.

Dose, one dram.

Lavender, Spirits of

Spirits of Lavender is an agreeable perfume, and enters as an ingredient in a variety of preparations.

Lavender, Compound Spirits of

Delightful aromatic compound, stimulant, cordial and stomachic. It is extensively employed as an adjuvant and corrigent of many medicines, and as a medicine to relieve gastric uneasiness, nausea, flatulence, and languor or faintness. It is a favorite remedy with hysterical and hypochondriacal persons. As prepared is perfectly miscible with water, without the cloudy appearance of some preparations.

Dose, thirty to sixty drops.

Lead. Acetate of

Astringent and sedative. Dupuytren used this remedy successfully internally, in three cases of aneurism of the aorta. Many others have employed it for the same purpose, and confirm the views of Dupuytren.

In dysentery the acetate of lead has been found a remedy of great power and efficacy. Combined with opium, in many cases, it proves a sovereign remedy. In active or passive hæmorrhages combined with quinia, it is signally useful; and in most cases of menorrhagia, it is the most efficacious remedy we possess.

In hemorrhage from the bowels in advanced stages, there is no better medicine than the acetate of lead and opium.

The indications are quite numerous for which this agent has been employed.

Dose, one-half to five grains.

Lead, Iodide of

This compound is supposed to have the resolvent properties of iodine, combined with those which are peculiar to lead.

It is said to have been usefully employed in the discussion of scrofulous tumours and other indolent swellings, and in the cure of obstinate ulcers, and for these purposes, has been used both internally, and locally in the form of an ointment.

Dose, one-half to five grains.

Lime, Carbolate of

The uses of carbolate of lime are mainly for disinfecting purposes.

Lime, Iodide of

(Crystals and Chemically Pure.)

This preparation is in the form of yellow crystals, is chemically pure and perfectly soluble. We prepare this to the exclusion of the impure article called "Commercial."

"Iodide of lime," says Dr. Talson, "was first introduced in 1855. It has been rapidly gaining favor among practitioners as a remedy of great value. It is used in those cases where iodide of potassium is indicated, but with more marked effects than usually attend the use of that salt. The lime and iodine are held together by a feeble affinity, and the salt will not admit of exposure without evolving free iodine. The solution is a colorless and almost tasteless liquid.

Each dram of the salt contains $8\frac{1}{2}$ grains of iodine, and each fluid ounce of the solution contains $\frac{1}{2}$ grain of iodine. The iodine in the solution exists in the form of iodide of calcium and iodide of lime. Acids decompose the solution and free the iodine and hence the utility of this form for the administration of iodine. Probably in the state of an oxide, the iodide of calcium is superior to the iodide of potassium in several particulars:

"1st. The smallness of the dose, and the minute state of its atomic divisions. 2d. Not passing off so quickly through the kidneys. 3d. Its ready combination with the blood and tissues, manifested by its alterative effects. 4th. In being nearly tasteless, and therefore readily taken by children. 5th. It is less expensive. 6th. In not producing either gastro-enteric or vesical irritation.

"It has been used with much success in throat diseases, in morbid conditions of the general system, in scrofulous affections, intractable cases of neuralgia, diseases caused by metallic poisons, &c. The dose of the salt is very small,—about $\frac{1}{2}$ of a grain given in solution, two or three times a day. Of the solution, 2 to 4 fluid drams may be given as often."

Neither the salts nor the solution should be exposed long to the air. The decomposing effect of the air may be readily seen by placing a small quantity of the solution in a glass, and blowing into the liquor through a tube. The product is a carbonate.

Incompatibles.—Acids, soluble carbonates, and sulphates.

Lime, Syrup of Iodide of

Iodide of Lime for convenience of administration, is recommended in the form of a Syrup. It is readily taken by children. One of its first effects is to increase the appetite. Its tonic properties readily become manifested. Children of scrofulous diathesis rapidly improve under its aid, and it is also particularly adapted to a large number of chronic or acute affections peculiar to them. It possesses decided alterative powers, and when alterative remedies are indicated, it can be used without hesitation.

One half to one dram of the syrup is recommended by Dr. Waring, as very efficacious in scrofulous cases of amenorrhœa and dysmenorrhœa; he cites the favorable testimony of Drs. Turnbull, Williams, Thompson and Ranking in regard to its use in these complaints.

Each fluid ounce contains the equivalent of three and one-half grains of iodine.

Dose, fifteen to thirty drops, properly diluted.

Lime, Iodide of, and Protoxide of Iron, Syrup of

This combination is valuable for its alterative and tonic properties, and differs from the following only in the absence of the vegetable tonic. It appears to be indicated in those states of the system when the want of tonicity and vitality, the depression of spirit, and nervous excitability, are dependent on diseases which require alterative agents.

Dose, one dram may be given to adults, two or three times a day; for children, half the quantity constitutes a dose.

Lime, and Protoxide of Iron, Elixir of Iodide of

This combination was first suggested by Dr. Dimick, of Ypsilanti. It is a valuable tonic preparation; it strengthens the system, and is readily retained upon the stomach.

The general operation of the preparations of iron, is as a tonic; they elevate the pulse, heighten the complexion, and promote the secretions, and are most useful when there is debility, relaxation and languid circulation. The most desirable is that which is most assimilable, and most acceptable and pleasant to the patients. The protoxide, to fulfill these conditions, is receiving high recommendations, and daily securing a stronger hold on the confidence of the profession as a remedial agency of superior efficacy in ordinary cases of prostration and disordered life. It is reliable, pleasant, and very free from any disagreeable taste. It is a conceded fact that vegetable tonics materially aid the operations of iron, and in the elixir we have this adjuvant.

The iodide of lime is not only used in those cases where the iodide of potassium is indicated and with more marked effects than usually attend the use of that salt, but is very valuable in cases where the iodide of potassium is inadmissible. It does not occasion iodism, or resorption of the healthy tissues; it does not excite the circulation, nor irritate the stomach and bladder by passing off too rapidly through the kidneys.

By combining the virtues of these two potent medicines in the form of a *palatable elixir*, we have an alterative and tonic of *paramount excellence*, one which promptly exerts its influence on the system by way of giving it tone and producing salutary change in disease.

The *Chicago Medical Journal* says: A very excellent alterative and tonic is afforded in TILDEN's beautiful *elixir of iodide of lime and protoxide of iron*. We have always, previously, been disappointed in securing desired results from the use of the "*iodide of lime*," but find this particular preparation to "fill the bill" to our very great satisfaction.

Each fluid dram contains iodide of lime one-fourth grain, protoxide of iron three grains.

Dose, one dram two or three times daily.

Lime, Elixir of Phosphate of

Alterative and an excellent ant-acid. Phosphate of lime in this form is readily taken by children, and is the pleasantest remedy that can be administered to meet a number of indications. In the treatment of rickets and mollities ossium, it is indicated

upon obvious chemical grounds. In scrofulous affection and phthisis, it has been employed with considerable advantage. It is admirably adapted to diarrhea, acidity, and gout accompanied with acidity.

Each fluid dram contains two grains of phosphate of lime, and four grains of phosphoric acid.

Dose, one to two drams.

Lithia, Carbonate of

This substance has come into use as a solvent for uric acid calculi. Its great solvent power for that acid also renders it of much service in gout and rheumatism. It is suggested as an injection into the bladder in cases of oxaluria and lithuria.

Dose, three to eight grains several times a day.

Magnesia, Citrate of, Granular Effervescent.

A popular and effective medicine when cooling aperients are needed, and in large doses acts as a mild cathartic.

The effervescing properties of this elegant preparation are retained in granular form, preserving the flavor as a palatable saline draught.

As an aperient or purgative it is pleasant to the taste, unobjectionable to the most delicate organization, mild but certain in its operation, and has a popularity unequalled by any other of its class of medicines. One to two drams, dissolved in two fluid ounces of water act as an aperient. Larger doses are required to produce a purgative operation.

Mercury, Biniodide of

(*Red.*)

This preparation of mercury has been used with much success in scrofula and syphilis. It has been found a valuable remedy in rheumatism, dependent on a syphilitic taint, having effected cures in several cases in which the Bichloride or common sublimated had been given in vain. Good results have followed its administration in cases of epilepsy caused by injuries to the head, in which thickening of the dura mater was suspected. The adventitious deposit becomes rapidly absorbed.

Dose, one-sixteenth of a grain, gradually increased to one-fourth.

Mercury, Protiodide of

(Green.)

Serviceable in scrofula and scrofulous syphilis, as well as in all cases of hypertrophy.

It should never be given at the same time with iodide of potassium, which converts it immediately into biniodide and metallic mercury.

Dose, one grain, gradually increased to three or four grains.

Nitrate of Silver.

Nitrate of silver is tonic, anti-spasmodic and sedative. It is much used as an escharotic, either in solution or solid. The strength of the solution should depend on the condition of the parts to which it is to be applied, and the character of the affections. It has been applied with benefit to warts, ulcers, fungous growths, chancres, cancerum oris, fetid discharges from the ear, tongue, gums, &c.

As a local application in erysipelas, leucorrhea, gonorrhea, granulations, excoriations, stricture of the urethra, ring-worms, corns and many cutaneous diseases, it has also been employed with favorable results. Especially useful to check the progress of malignant-erysipelas.

Much benefit has also been derived from the solution in venereal affections of the throat and other throat difficulties, here applied by means of a sponge. If the pain be excessive, it may be appeased by a wash of common salt. Chloride of sodium converts the nitrate into an insoluble salt.

In obstinate cases of diarrhea of children, Dr. Willshire, observes Dr. Waring, has used the following formula with great success:—

B. Argent. Nit,	. . . . .	gr. j.
Acid Nitric Dil,	. . . . .	Minims, v.
Mucilag. Acac., Syrup, Simp. āā,	. . . . .	f 3 vj.
M. Sumat,	f 3 j.	4tā quāque horā.

It is recommended in gastralgia, jaundice, dyspepsia, diarrhea of phthisis, in dysentery, acute and chronic, and many other diseases of the abdominal viscera; in spasmodic affections, chorea, epilepsy, whooping-cough and asthma. Certain rules should be observed in its administration. Dose, one-fourth to one-half grain.

Opium, Deodorized Fluid.

The extensive applicability of opium to the cure and mitigation.

of disease, has incorporated it into almost every practice of medicine. It is in its primary action, excitant, speedily relieving pain; capable beyond any other narcotic of producing sleep; powerfully anti-spasmodic; possesses the power of allaying local and general irritation; suppresses morbid discharges; and in combination with small doses of emetic medicines, is pre-eminently a diaphoretic. The secretions, severally, with the exception of that from the skin, are suspended, or diminished after the administration of opium.

On some constitutions the crude article produces peculiar effects, widely different from its usual mode of operation; such as great sickness and vomiting, restlessness, headache, delirium and even obstinate wakefulness, which ill effects are owing to the presence in it of the deleterious principles, *narcotine*, *papaverine*, and *thebaine*. In the *fluid opium* deodorized these noxious agents are absent, and the three great soporific principles, *morphia*, *narcia* and *codeia*, are present, purified and separated from the toxicological and deleterious principles, and act conjointly, constituting a soporific and anodyne of paramount excellence; one that exerts its tranquilizing influence in a manner satisfactory to both physician and patient, one that is now generally acknowledged to best meet the numerous cases when opiates are indicated.

It is of the strength of laudanum, and superior to the many empirical elixirs and solutions in use, *possessing in reality all the advantages the latter are claimed to combine*.

The *fluid opium*, deodorized, is a very pleasant anodyne and anti-spasmodic, much used to allay cough in chronic catarrh, asthma, consumption, &c.; to relieve nausea and slight pains in the stomach and bowels; to check diarrhoea; and in infantile cases to procure sleep.

Repose is usually induced by the minimum dose, but in obstinate irritation, the dose can be repeated several times with safety.

Dose, for an infant, one to three drops; for an adult, fifteen to twenty drops.

Pepsine.

(Pure.)

This substance is regarded as a positive anatomical ingredient of the gastric juice, both essential to its constitution and physiological action. Introduced into the system it increases the appetite, allays irritability of the stomach, and promotes changes in this viscus essential to healthy digestion of the nitrogenous elements of food. See Journal *Materia Medica*, Vol. 5 and 6.

Dose, ten to fifteen grains immediately before or after meals.

Pepsine, Strychnia and Bismuth, Elixir of

Highly lauded as a digestive. Particularly adapted to dyspepsia, the irritability of the stomach following chronic gastritis, and in that attendant on convalescence and certain exhaustive diseases such as phthisis. In these states, the gastric juice is not secreted in sufficient quantity to enable the stomach to perform its proper function. Pepsine is claimed to contravene this departure from health by keeping up artificial digestion, while strychnia gives tone and integrity to the sympathetic, in which is acknowledged to reside the "secretive co-ordination," thereby tending to effect a permanent cure, and bismuth operates as a sedative and alterative, and plays an important part in irritableness of the stomach, and in inflamed conditions of the gastro-enteric mucuous membranes.

Each fluid dram contains five grains of pepsine, $\frac{1}{2}$ grain of strychnia, and one grain ammonio-citrate of bismuth.

Dose, one dram before meals.

Pepsine, Wine of

This elegant cordial contains the digestive principle of the gastric juice held in solution by *pure sherry wine*, and is acceptable to even those of the most delicate organizations. No more grateful and efficient medicine has been tried in dyspepsia and kindred diseases.

Dose, from a half to a wine glassful should be taken just before or immediately after meals.

Phosphates, Syrup of

Compounded of Lime, Soda, Potassa and Iron—Chemical Food.

This remedy has been suggested in cases of debility, or constitutional languor, where the functions of the system lack their normal vitality, and yet these morbid symptoms are traceable to no one single positive cause. Its use, though, is advised only in those cases where the simple syrup of phosphate of iron fails to bring about the desired effect. But the value of the several ingredients as nutritive tonics is too well known to require a lengthy notice of the therapeutics of the compound.

Dose, one-half to one dram.

Potassa, Acetate of.

Acetate of potassa acts as a diuretic in doses of from a scruple to a drachm, and as a mild cathartic when given to the extent of two or three drachms. The late Dr. Duncan, of Edinburgh, considered it to be a medicine of great efficacy, and one of our best saline deobstruents. Dr. J. A. Eaton, of Glasgow, has found it useful in several skin diseases, such as psoriasis, eczema, and lepra. Cases which had resisted the ordinary remedies were cured, after a treatment occupying from three weeks to two months. The dose given by Dr. Eaton was half a drachm, three times a day, dissolved in water. The remedy seemed to act through the kidneys, the urine being remarkably increased, both in its aqueous and solid contents. The late Dr. Golding Bird treated a large number of cases of acute rheumatism with remarkable success, with this salt. The pain of the disease declined as soon as the urine became alkaline, and rose in specific gravity. The quantity given, in twenty-four hours, was half an ounce in divided doses, largely diluted with water. (U. S. D.)

It is spoken of as efficacious in large doses in acute and subacute urethritis with mucous or puruloid discharges, and in similar affections of the vagina and uterus.

Dose. no nicety need be observed.

Potassa, Solution of Arsenite of.

(*Fowler's Solution.*)

Arsenic, from an early date, has been successfully used as an anti-periodic. The number of physicians of talent and fruitful experience, both in America and Europe, who have lauded its efficacy in intermittent and periodic fevers, is too large to leave a shadow of a doubt of its utility in those diseases. It is not claimed to supersede quinia in recent intermittent fevers, but is promised equal to quinia in chronic forms of that affection, and to constitute an invaluable relay in the small proportion of cases which resist cinchona in all its forms and in every dose. Fowler effected radical cures, by the arsenical solution, of 171 out of 247 cases of "agues." Withering used the solution with complete success in 34 out of 48 cases, though in the remaining 15 cases it failed. Dr. T. D. Mitchell found other preparations besides Fowler's solution, ineffectual.

There is a variety of diseases amenable to this solution, among which may be named chorea, neuralgia, chronic rheumatism, inveterate cutaneous affections, such as chronic eczema, psoriasis, chronic impetigo and lichen, and others. It has also been found

efficacious in menorrhagia. Stillé records the following regulations, which Mr. Hunt claims should be observed in the arsenical treatment:—

1. The use of arsenic is contra-indicated when there is a feverish state of the system, a quick pulse, hot skin, &c.

2. It should never be given on an empty stomach.

3. Should never be given in increasing doses. This is a fatal and almost universal mistake.

4. The largest dose ever required is five minims of Fowler's solution, three times a day.

5. This, if mixed with the food, will not irritate the stomach or bowels, but will, in the course of a few days or weeks, produce an itching or smarting of the conjunctiva. This membrane will appear slightly inflamed, and the lower eyelid will soon appear a little puffed or swollen. The cutaneous disease will now begin to decline, and the dose must be reduced to four minims.

6. If the conjunctiva continues much inflamed, the dose must be further reduced, but the conjunctiva must be kept tender throughout the whole course.

7. If the skin becomes more inflamed, the course must not be interrupted, but a few leeches must be applied to the margin of the diseased portions, or an occasional aperient exhibited.

8. The arsenical course must be continued for as many months after the final disappearance of the eruption, as it had existed years before. This will prove a security against a relapse.

9. Cutaneous disorders treated in this way seldom return, and never severely, nor is there any danger of metastasis.

Antidotes.—Free evacuations of the stomach by emetics; ipecacuanha is preferred or sulphate of copper or zinc. The emesis should be promoted by warm drinks, or other mixtures, after which the hydrated sesquioxide of iron, or the hydrated sulphuret of iron should be administered in large doses. The same plan of treatment may be pursued to combat poisoning by the preceding arsenical preparation.

Incompatibles—Acids, acidulous salts, sulphuretted hydrogen and its compounds, sulphates of magnesia, iron and copper; chlorides of barium, calcium and iron, nitrate of silver; alum, &c.

Dose, five to ten drops three times a day.

Potassa, Chlorate of.

(Chemically pure.)

Refrigerant and diuretic. This medicine has been very successfully employed in scorbutic and hepatic affections, cancrum oris, abscesses, boils, mercurial salivation, maternal stomatitis, eruptions

and by some practitioners mainly relied on in scarlatina, fetid breath, diphtheria, and ordinary cases of sore throat. It is acknowledged a superior remedy in gangrene and ulceration of the mouth, destroying the disagreeable odor, diminishing the discharge of saliva, and expediting granulation. Some authorities pronounce it a sedative to the nervous and circulatory systems, a stimulant to the digestive and urinary organs, as well as an alterative and stimulant to mucous linings, on account of which last property it appears to be indicated in morbid and inordinate mucous discharges.

Dr Watson states that one dram of the salt dissolved in a pint of water is a beneficial daily drink in typhoid fever. "Prof Lombard (W.) strongly recommends the chlorate of potash in doses of gr. xv,—xviii, every four or six hours in anasarca and ascites after typhus fevers." The desired object has been accomplished by this remedy in pregnancy, when the results of prior pregnancies indicated the foetus would be either stillborn or very weakly. It may be applied externally as a wash or injection in solution of six to twenty grains to the fluid ounce of water. It answers thus in affections of the mouth, aided by internal administration.

One fluid ounce of water dissolves about twenty-five grains. No nicety need be observed in the dose. As a prophylactic in salivation, small doses will serve.

Potassium, Arseniated Bromide of

The therapeutics of this preparation have received considerable attention and laudation. Dr. Chas. A. Lee says: "I am satisfied it is a most valuable preparation." Dr. L. Elsberg, of New York, in a communication to the *Medical and Surgical Reporter*, Philadelphia, (Sept. 24, 1859), spoke of it as possessing "*tonic, alterative and resolvent properties*." E. H. Sholl, M. D., in the same journal, has recently endorsed Dr. E.'s opinion, and from actual experience proclaims himself satisfied "with the rapidity and certainty of its excellent tonic effects," remarking:

"It presents to the profession a remedy concentrated and palatable, objects not to be disregarded, when contending, as we frequently have to do, in the peculiar class of cases to which it adapts itself, with stomachs easily revolted by the grosser and bulkier medicines." Dr. S. has used it in chronic intermittents, and this class of diseases, and says, "it has succeeded admirably, relieving them more speedily and certainly than barks, ferruginous tonics, arsenic or strychnia." He recommends it in secondary syphilis, occurring in persons of a scrofulous nature; advises it in combination with *stillingia*, in chlorosis; with *sanguinaria*, in

"long-standing cases of neuralgia; and with *ergot* in climacteric menorrhagia. More authority could be adduced.

Dose, three to four drops, in a wine glass of water, twice daily.

Potassium, Bromide of

This salt has been employed with good results in scrofula, enlargements of the spleen, epilepsy, incontinence of urine of children, gonorrhea and chordee, nymphomania, priapism, and some forms of spermatorrhea, &c. In syphilitic eruptions it has proven a good substitute for iodide of potassium.

Dr. Alexander J. Stone has recently called the attention of the profession to a new and important property of this salt, viz: the power of *counteracting the nausea attending etherization*. Dr. S. has several columns in the Boston Medical and Surgical Journal, Feb. 28, 1868, devoted to an exposition of the *Power of Bromide of Potassium, in Checking the Reflex Nausea induced by Etherization*. Dr. S. instances some thirty unselected cases, where, in his practice, this new property of the bromide was exhibited so as to completely arrest the disagreeable sequelæ attendant upon the inhalation of ether, and claims to have so thoroughly tested the reality of this new quality as to place unqualified confidence in it. Dr. S. moreover remarks: "In Prof. Storer's practice, I have, within the past four months, been obliged to prescribe it for various symptoms attending uterine disease, such as insomnia, hysteria, epilepsy, and other forms of mental and nervous derangements. More than a hundred and fifty times, speaking within bounds, and with the single exception of the resulting acnoid eruption, which passes away voluntarily when the medicine is discontinued, I have been so fortunate as not to have seen any ill results. In case it is to be given after the use of ether, I would recommend the exhibition of either thirty or forty grains every thirty, forty-five or sixty minutes, as may be found desirable.

"I am inclined to think, however, from the results of a somewhat extended series of experiments made with this drug by Dr. Storer upon himself, and communicated to me, that there is little or no risk of gastric, nervous, or other irritation from its use even in doses that might seem enormous, provided the bromide is exhibited in at least twice the amount of water required to dissolve it."

Dose, three to ten grains three times a day.

Potassium, Chloride of

Chloride of Potassium is anti-neuropathic, and an alterative pu-

rier of the blood. Used for nearly the same purpose as the chlorate of potassa.

Potassium, Iodide of

Iodide of potassium is the most important of the several preparations of iodine, possesses its general therapeutic properties, and is applicable to an extended number of diseases. It produces very marked effects on the secretions, which it uniformly increases, and into which it readily passes. It generally increases the appetite and flesh. The general character of its action is to remove abnormal tissue, eliminating the material by the kidneys. It is very beneficial in struma in all its forms, occasionally in chorea after the preparations of iron have failed, in gout, albuminuria, ague, in the various forms of syphilis, in mercurio-syphilitic sore throat, gonorrhoea, leucorrhoea, neuralgia, circumorbital pains, hæmoptysis, mercurial humors and lead palsy. In that form of rheumatism characterized by wandering pains in the bones, and in tubercular forms of the venereal eruptions, in the suppurative stage of pneumonia, its efficacy is attested by the highest authority.

Some writers think it decidedly more efficacious in stomatitis than chlorate of potassa. Large doses are advised by Mr. Sankey in ague. It is pronounced the best remedy in mercurio-syphilitic sore throat. It has been successfully employed in strumous inflammation of the eye, given in the compound syrup of sarsaparilla. This valuable medicine when given in small doses, will occasionally give rise to troublesome symptoms, and severely affect the system. *Five grains* have produced coryza, conjunctivitis, dyspnoea, and other serious disturbances. This fact militates against the expediency of giving it even in large quantities, until warranted in so doing by a knowledge of the constitutional idiosyncrasies and susceptibility of the patient to its action.

Dose, from two to ten grains.

Quinia.

This is the name of an alkaloid obtained from the Peruvian Bark. It was discovered in the year 1820, by Pelletier and Caventou, and has since steadily grown in popularity until it now takes its place among the most valuable agents in the materia medica, and by common consent is regarded "a most important gift from modern analytical chemistry to medicine."

Quinia is applicable to all the diseases for which cinchona has been long used and celebrated as a tonic, febrifuge and anti-periodic; having all the medicinal properties of the crude bark save its

astringency. It claims the preference to the crude bark in not being open to the objections of overloading the stomach, and bringing on dyspepsia and other derangements of the alimentary canal, which are the results of large doses in which the crude bark must be administered to produce the desired effect. Quinia is seldom, if ever given alone, but generally in the form of salt. Its therapeutic uses are too obvious to require enumeration.

Quinia, Chlorate of.

This article was introduced into medicine within the last year by Dr. Lyons, of Dublin, who claims for it a febrifuge of surpassing potency. The record of his experience with this agent would place it foremost, in the rank of remedies to combat the graver forms of typhus, typhoid pneumonia, scarlatina, small-pox, low phlegmonous inflammation, and low pyrexial states. When the heart is feeble, it is said to possess an almost magical efficacy in reducing yet sustaining the pulsation.

In *Braithwaite's Retrospect*, Part 54, page 238, may be found an interesting communication, (Copied from the *Medical Press and Circular*, May 30, 1866, page 562), on the employment of this new febrifuge. A case of scarlatina anginosa is recorded where rapid defervescence followed the use of this agent. "The chlorate of quinia was ordered for this patient in three grain doses every third hour, in addition to which the tonsils were washed with a 20 grain solution of silver, and a gargle of chlorate of potash directed to be used frequently during the day. * * * On the fourth day defervescence was well established, the pulse had fallen to 80 from 130, the throat was quite restored to a natural condition, and the patient in all respects convalescent. In two other cases of scarlatina, but of milder form, the chlorate was employed with very satisfactory results."

The writer also cites a case of protracted typhus fever with diphtheria supervening which had proved rebellious against every other plan of treatment, but which rapidly succumbed to the chlorate of quinia in connection with the ordinary local measures. The diphtheritic exudations were first carefully removed, after which the muriated tincture of iron was freely applied upon the affected surface, beside which the throat was repeatedly gargled with the chlorate of potash.

The patient was further directed to take the chlorate of quinia in about five grain doses every third hour, according to the following formula:—

R. Chloratis quiniæ, 3jss; acidi perchlorici, 3ij; syrup aurantii, 3ij; aquæ distillatæ, ad 3viij. M.

Sumat 3 ss. 3tiis horis.

"The gargle employed in this and the previous case consisted of two drachms of chlorate of potash, two drachms perchloric acid, three ounces of syrup, and five ounces of water. Under the use of these remedies, the patient rapidly improved, and about the 28th day from the first invasion of the fever convalescence began to be fairly established, and continued permanent.

"From the powerful oxidising and general stimulating agency of chloric acid, and the influence of quinia as a nervo-tonic, Dr. Lyons has been led to the idea of combining these two remedial agents, with a view of obtaining a febrifuge medicine of great potency.

"From some half dozen cases in which he has as yet employed this drug including scarlatina, typhus, the diphtheritic case above mentioned, and in low forms of pneumonia, Dr. Lyons has obtained results which so far satisfy him of its efficacy and utility, and he invites the co-operation of his professional brethren in testing the value of this salt of quinia in low pyrexial states."

The *Medical Press and Circular*, Dec. 19, 1866, again says: "Further experience of this valuable agent has confirmed the views entertained by its inventor. * * * In a case of low typhus, with extremely feeble heart, and pulse at 144, the exhibition of a ten grain dose brought the pulse down from twelve to fifteen beats within an hour after its administration. A case of small-pox was treated with it from the outset, in which the pulse never ran above ninety. It is usually administered by Dr. Lyons in a dose from three to five grains dissolved by the aid of the acid of a like number of drops of perchloric acid."

Quinia, Hypophosphite of

In this combination we have a remedy which acts promptly on the system, as a stimulant tonic, and regenerator of nervous force and integrity.

Quinia, Tannate of

Though applicable to the many diseases for which quinia is usually prescribed, its specific value appears manifest in nocturnal sweats. M. Delioux, regards it superior to any other preparation of bark in the management of colliquative sweats which occur in phthisis and other diseases. His conclusion was the result of a series of experiments with the several preparations of the bark.—*L' Union Medicale*, No. 43 says: "This agent is supposed to be peculiarly applicable to two essential conditions in this symptom," meaning colliquative sweats, "organic debility and periodicity.—

M. Delioux cites many cases in support of his views. He administers this agent in two or three doses of six or eight grains during the afternoon. It is insipid, and causes neither wakefulness nor indigestion."

Quinia, Valerianate of

Nervine, tonic, and febrifuge It is very efficacious in intermittent neuralgia, hemicrania and in those disorders where a tonic and anti-periodic influence is indicated and the nerves also require to be acted upon for the relief of wakefulness, restlessness, and nervous irritability. In such states of the system there is no better remedy.

Dose, one grain.

Rhubarb and Magnesia, Elixir of.

This elixir holds the active principles of these important medicinal agents, rhubarb and magnesia, together with citric acid in a soluble state, secures an action on the system somewhat similar yet more satisfactory and prompt than either agent when used singly, and is therefore presented to the profession as an excellent and pleasant remedial cordial for the ordinary derangements of the gastro-enteric duct.

The individual medicinal uses and action of the several elementary constituents of this elixir indicate its employment in febrile and inflammatory attacks, when a gentle refrigerant aperient is required. As the rhubarb principle combines the remarkable union of the cathartic and astringent power, the latter not interfering with the former, as the purgative effect precedes the astringent, the elixir is eminently appropriate in mild cases of diarrhea and dysentery. The tonic element renders it peculiarly fit for infantile cases attended with enfeebled digestion and irritation of the alimentary canal.

In small doses it acts as a mild tonic, improving digestion, and promoting the appetite, and if administered in appropriate quantities, produces an aperient or purgative action. It is grateful to the taste and hence particularly applicable to children and adults of a delicate constitution. The therapeutic uses of this combination are multiform. When dyspepsia occurs from atony of the stomach, small doses of this elixir before each meal, will be found beneficial.

Mild purgative medicines are far better to overcome constipation of the bowels, than the more powerful cathartics, and, per-

haps, no more efficacious preparation can be found than the elixir citrate magnesia and rhubarb. In all cases, when cathartics are indicated, it may be relied upon.

In mild cases of diarrhea this combination has been found particularly valuable. Should the diarrhea be associated with much irritation and pain, a few drops of the fluid opium deodorized should be added.

As a stomachic and tonic, small doses of this elixir will prove advantageous in promoting the appetite, and aiding the digestive process.

In neuralgia and nervous headache arising from a morbid condition of the stomach, this elixir is often very effectual, and in the early stages of dysentery, when the bowels require to be freed from all irritating matters, this medicine is confidently recommended, as it does not injure the tone of the digestive apparatus, but rather imparts strength.

This elixir is well adapted to a variety of complaints incident to childhood. Scrofulous children will derive much benefit from its use, particularly such as are afflicted with enlargement of the mesenteric glands.

Dose, one to three teaspoonfuls for adults.

Starch, Syrup of Iodide of.

This preparation produces the eutrophic effects of iodine without the occurrence of that gastric irritation and the other unpleasant symptoms which occasionally attend the exhibition of iodine in a free state.

Prof. J. C. Dalton, of New York, prefers it to any other preparation of iodine for obtaining the alterative apart from the irritant effects of this substance.

Each fluid ounce contains iodine, one and a half grains.

Dose, one dram two or three times a day.

Strychnia, Elixir of Valerianate of.

This combination will be found useful in a variety of nervous diseases, as well as in many cases of exhaustion. Few remedies will be found more serviceable in neuralgia than this elixir. It can be alternated with most of the usual agents employed in the treatment of neuralgia.

Frequently in hysteria, this compound will prove of more advantage than any other preparation. No one who has been in the

habit of administering it in this malady would willingly be without it.

Evidence is not wanting of its utility in epilepsy. It will be found a valuable adjuvant in the treatment of this disease, when occasioned by nervous exhaustion. Chorea is sometimes obstinate, and in spite of all ordinary remedies, will now and then give but little or no evidence of improvement. Such cases will be benefited by the elixir. When the paralysis occurs as a sequence of the disappearance of the catamenia, this elixir will be found of especial value. It is confidently recommended in constipation depending upon a loss of tone of the muscular coat of the large bowels and a sufficient propelling power of the upper rectum; in this condition of the system a beneficial change will be produced by administering this medicine along with mild cathartics, and continuing its use for several weeks. Many other affections might be instanced in which this remedy will prove valuable.

Each fluid dram contains one-sixteenth of a grain of valerianate of strychnia.

Dose, one-half to one fluid dram.

Santonin.

This is the exclusive principle of *A. Santonica*. It has been widely used in Europe for its vermifuge properties. The latest experience with it in American practice confirms all that has been written in its favor. For a further notice of its therapeutics, see pills of santonin, page 133.

Dose, one-half to one grain.

Salicin.

Salicin possesses tonic properties in an eminent degree. It has been employed as a substitute for the alkaloids of the peruvian barks, particularly in intermittent fever, and has attracted much attention from its asserted efficacy in the cure of this complaint.— It has even been pronounced by some, of equal efficacy with sulphate of quinia, in arresting intermittents. In European practice, where it has been more faithfully tested, it has achieved wonderful results and received high encomiums.

Dose, from two to eight grains and repeated, so that from twenty to forty grains may be taken daily, or between the paroxysms of the intermittents.

Sodium, Iodide of

The medical properties and action of this salt have been inves-

tigated by Dr. Gamberini (Waring's Therapeutics), who deduces the following conclusions: 1. Soda being a very common ingredient in the organism, the *iodide* of its base appears to be best suited to the human system. 2. Its taste is much less disagreeable than that of the *iodide of potassium*. 3. It is less likely to occasion iodism. 4. It is better borne than the *potassium salts*, and consequently its dose can be almost daily increased; it thus becomes a more efficient remedy. 5. It has sometimes succeeded when the *iodide of potassium* has failed. 6. It may be given daily in three equal doses, \mathfrak{Dj} of the *salt* to \mathfrak{z} \mathfrak{ij} of *water* increasing the strength of the solution every two or three days by six grains.—Some patients have, in this manner, been able to take \mathfrak{z} \mathfrak{ij} daily, without the slightest inconvenience. 7. It is admirably adapted to cases in which the corresponding *salt of potassium* is indicated. 8. It is the best substitute for *mercury*.

Dose, five to fifteen grains.

Sulphur, Iodide of.

Its principal use is as an external application. Pereira observes "It is a very stimulant remedy, adapted to cases of chronic skin diseases, which have survived the stage of inflammation, or have been dry and free from inflammation during their whole course, such as psoriasis, lepra, &c."

It may also be given internally in the dose of from one to six grains. When taken internally its action resembles, if it be not identical with, that of iodine.

Styptic Colloid.

(With Iron.)

Styptic and adhesive. The tincture of the muriate of iron constitutes the base of this styptic. It is a very efficient local application to arrest hemorrhage from leech bites, wounds and surgical operations, &c., and applicable to venereal warts, spongy granulations, ulcers attended with profuse discharge, fungous sores, compound fractures, burns, and suppurating surfaces.

Styptic Colloid.

(With Tannin.)

Tannin forms the base of this styptic. Its uses are obvious.

Styptic Colloid.

(With Carbolic Acid.)

Styptic, adhesive, and anti-septic. Its influence on the blood, serum, pus, and all fetid discharges is to solidify and deodorize. It modifies suppuration, and facilitates cicatrization. Numerous observations of gangrenous wounds, diffuse phlegmon and of necrosis are reported, which readily improved under the action of this solution. It forms a beneficial protectorate to sores and abrasions; an efficient styptic in cases of external hemorrhages, and a valuable anti-septic in ill-conditioned ulcers, sloughing wounds, carbuncles and cancerous ulcerations.

Styptic Colloid.

(With Creasote.)

An excellent unirritating styptic and deodorizer. This valuable topical preparation possesses the styptic properties of tannin with the anti-septic qualities of creasote.

Wine of Wild Cherry.

In *Braithwaite's Retrospect* Part 55, page 258, can be found a lengthy communication on the therapeutics of *prunus virginiana*, or wild cherry, (*Medical Times and Gazette*, 1867), by Dr. Clifford Allbutt, from which the following extracts are copied:—

“(The *Prunus Virginiana*, or American Wild Cherry, has a special power of giving tone and calmness to the arterial system. The rapidity and intensity of the heart's action are lessened.)

“I have found the wild cherry useful, not only in cases of cardiac disturbance, but also of general nervous excitability, of “atonic” dyspepsia, and of intestinal irritability. It seems, however, to have a more special bearing upon the arterial nervo-muscular tissues, as digitalis also has, and in proper cases it comes as a valuable substitute for digitalis, when this medicine is ill-borne. Many sedatives, as you are aware, tend to cause nausea or vomiting in those who take them, as do, for example, opium, chloroform, tobacco, and many others. Digitalis in its degree, shares with them that peculiarity; and you will find in practice many persons who can not bear digitalis, even in small doses, on account of the nausea which it causes in them. We may often avoid this ill effect by judicious exhibition and combination, but sometimes no care can prevent it. In

such constitutions or states of disease the wild cherry is of great value. In doses under half a drachm of the tincture, and under one ounce of the infusion, it is, so far as I can tell, invariably well borne. On the other hand, it is not equal to digitalis in the special relief which we need in extreme cases. It is, indeed, rather to be used in the continuous treatment which follows the removal of the worst symptoms. The wild cherry is not an heroic remedy, and yet it is not an insignificant one. Moreover, it is a perfectly safe one. I have never seen a case among the many which I have treated, where the infusion or tincture of the wild cherry has been followed by any poisonous consequences. On the contrary, I seldom prescribe it in suitable cases without receiving a spontaneous tribute from my patient to the success of the medicine. In doses larger than those I have mentioned, however, I have found that the valuable properties, of the drug were not obtained, and, indeed, that in more than one instance increased distress, and sometimes even sickness seemed to result from the use of it. When doses beginning at fifteen or twenty drops of the tincture and half an ounce of the cold infusion do not make some change for the better, I now lay aside the medicine till a more convenient season. Medicines, like mortals, are not at all hours infallible.

"[It is in mitral regurgitation, perhaps, that the wild cherry is the most valuable. Here a slight mal-adaptation may cause most painful disturbance. Steel is not often admissible in any stage of this disease.]

"J. G., aged 45, mill-hand, complains of cough, occasional blood-spitting, and of wearing pain in left arm; also of palpitation, dyspnoea, and occasional slight anasarca. There is decided, but not unmanageable, venous congestion of the viscera, &c., a poor and irregular pulse, and a "mitral regurgitant murmur." *R. Infus. pruni virgin.* 3j., three times a day. The week following, the patient paid a spontaneous tribute to the power of the medicine, and in six weeks had regained considerable ease.

"I might tell you of twenty such cases. In nearly all, the patients were left to give their own opinion, and in addition to ease at the heart, they often expressed much pleasure at the restoration of appetite. Loss of appetite, probably due to congestion of the capillaries of the stomach, and consequent suppression of gastric secretion, is a frequent symptom of heart disease affecting the venous flow.

"I shall add some observations on the value of *prunus virginiana* in a few other diseases. In *chronic bronchitis*, depending upon or accompanied by valvular disease or dilatation of the chambers of the heart, I have found it of great service. Such cases, are you know, but too common. In them I always found my best remedy in digitalis; I now find the *prunus virginiana* does nearly as well—I

have often thought quite as well—in calming the cough and so-called asthma, and it is infinitely preferable in that it also improves the appetite and strength, and may be given continuously and fearlessly. These patients are among the crosses of the hospital physician; incurable, but capable of passing relief, they hang on winter after winter, gasping forth their tale of inevitable sorrows.

“In conclusion, I may say that in many cases of the kind remediable by *prunus virginiana* I have tried other vegetable bitters with hydrocyanic acid added. I have not found this imitation to answer, and I believe, therefore, that the good effects of the drug depend upon something more than the prussic acid it contains.”

From the fluid extract can conveniently be made the wine, tincture or infusion, to suit the exigency of the case, the preference of the physicians, and the constitutional idiosyncrasy of the patient.

The wine of wild cherry is scientifically prepared, the process being the same as is employed in the preparation of the pure extracts, is pleasant and agreeable, possessing a remedial utility, in many diseases, of paramount importance to that of any other preparation of cherry, and is especially applicable in the cases above recorded. It is subject to no heat by which the hydrocyanic acid is decomposed, thus preserving the whole of the sedative properties and tonic virtues of the bark with a portion of its tannic astringency, held in solution by pure sherry wine.

Uniting with a tonic power the property of quieting irritation, and diminishing nervous excitability, it is adapted to cases where the digestive powers are impaired with general local irritation, existing at the same time. Its uses are indicated in all cases requiring the use of a general tonic, particularly in cases of the impairment of the constitution by dyspepsia, indigestion, &c., in dyspepsia attended with neuralgic symptoms, and general debility attending inflammatory fevers.

On account of its generally astringent properties united with its sedative action, it has been found highly beneficial in complaints incident to the summer months, in diarrhea, chronic diarrhea, and in preventing the weakness and relaxation of the bowels which produce them. It may be administered in doses of a dram to half a wine glass, three times a day.

Ferrated Wine of Wild Cherry.

Wild cherry in various forms has long been a favorite remedy with American practitioners, as well as in domestic use. It is a powerful tonic, and stimulant on the digestive organs, calmative of nervous irritability, and an arterial sedative. From this combined

action it has been found very useful in a variety of diseases, or states of disease, when it is of importance to impart tonicity, and yet to avoid any undue excitement of the heart and blood vessels, as during the first stages of convalescence from inflammatory attacks, and in many pulmonary diseases.

Although the reputation of wild cherry as a medicine has been long established, not until recently have its merits been properly appreciated, and we predict for it a still higher place in therapeutics when its properties shall be more thoroughly investigated, and its curative influence shall receive impartial judgment. It possesses one great advantage as a tonic over other agents of that class, viz: its ability to impart tonicity to the system without occasioning undue excitement of the circulatory system.

Iron is acknowledged to be an hæmatinic of paramount importance to all other blood-restoratives, and pre-eminently tonic. There is no article in the *materia medica* which is of more unquestionable efficacy, possesses a wider adaptation to diseases, and none that enters into so great a number of combinations to meet the demands of complications in diseases.

It has long been desired to unite these important medicinal agents, which has been accomplished in this preparation, for cases of anæmia, as well as for cases of impaired health, with much nervous irritability, when cinchonas are inadmissible, and iron alone can not be tolerated, however much the system may need its influence. It is recommended with much confidence in cases of atony which often succeeds inflammatory diseases, dyspepsia, scrofula, and consumption.

This new combination has achieved considerable notoriety as a sedative-tonic of paramount importance to any other similar medicine in use. It reaches a very large class of diseases. Scores of testimonials could be presented showing its efficacy and promptness of action. But the following must suffice:

"The Ferrated Wine of Wild Cherry is really the best form in which iron has been presented to persons of delicate tastes. I have given it to females who can not take iron in the ordinary way, without the least unpleasant exhibition, because the taste is perfectly concealed, being a pleasant beverage."

"Your Wine of Wild Cherry exceeds anything I have ever used in my practice, as a tonic, without undue excitement to the circulation, and is valuable for delicate persons. The profession are under obligations to you for this combination."

"Undoubtedly, the best preparation of this agent for the treatment of chlorosis, is the *ferrated wine* of wild cherry. Diseases of this class uncomplicated, will in most instances, be signally relieved by this valuable combination. By uniting the hæmatinic and tonic properties of iron with the sedative and tonic properties of

the prunus, in the ferrated wine of wild cherry, a happy union of medical properties is accomplished which renders it more useful in a great variety of atonic diseases, and far more efficient than the same agents would be if administered separately."

"The wine of wild cherry possesses properties well adapted to relieve many of the most harassing symptoms that annoy dyspeptics. Should there exist an acid state of the stomach, bismuth sub-nit. may be alternated with the wine with a prospect of success. Some cases will require a still more tonic treatment; in such, the ferrated wine of wild cherry will be found valuable. In those cases complicated with leucorrhœa or with amenorrhœa, this preparation will prove of signal service."

"One of the most valuable combinations in amenorrhœa, is ferrated wine of wild cherry and stramonium. The quantity of stramonium should be graduated by the symptoms presented in each case."

"If stimulants and tonics appear to be indicated, no better remedy can be selected than the ferrated wine of wild cherry to combat dysmenorrhœa. Should this fail in giving relief, alternate it with half grain doses of the extract of stramonium. This seldom fails to quiet the patient."

Dose, one to three drams three times daily.

ZINC.

Zinc, Acetate of

Astringent. Chiefly used in collyria and injections. It is rarely used as an internal remedy; though Dr. Heer (Waring), recommends it in typhoid fevers, conjoined with stimulants, tonics, or anti-spasmodics, as the case may require.

When astringents are required to restore the mucous secretions to their normal state, especially in gonorrhœa and ophthalmia, the acetate of zinc plays an important part. One or two grains, dissolved in an ounce of rose-water, or an ounce of mucilage of sassafras made with rose-water, constitutes a very good collyrium. Dose, as a tonic and anti-spasmodic, one to two grains; as an emetic, ten to twenty grains.

Zinc, Chloride of

Used chiefly as an escharotic in cancerous affections, and to ulcers of an anomalous character; it appears not only to destroy the diseased structure, but to excite a new action to the surrounding parts.

Dr. Stanelli, (*Annali Universali de Medicina*), used the chloride

with uniform success in more than fifty cases of tooth-ache, and in no one case did he notice that it had any progressive influence on caries. His mode of application was to apply a small quantity to the cavity of the painful tooth, with a small hair pencil, taking the precaution carefully to surround with cotton wadding, and when the chloride has been applied to well fill the cavity with the same cotton. The mouth should finally be washed with a little warm water.

A lotion of a very weak solution has been found useful in flabby scrofulous ulcerations, while two grains to the fluid ounce of distilled water has been employed with good success in atonic ulcerations of the feet, in syphilitic ulcers, and in pityriasis, &c

Zinc, Iodide of

Tonic, astringent, and anti-spasmodic. It has been exhibited with favorable results in spasmodic manifestations occurring in persons of a scrofulous diathesis. Dr. Venables (Waring), advises it, in one grain doses, repeated three times a day, gradually increased, in chronic diseases of the liver, especially in persons of weak, irritable habits. He deems it less irritative than the iodide of iron, or other metals. It has also been used with much success in chorea, scrofula, cachexia, and some forms of hysteria.

Dose, one grain.

Zinc, Lactate of

Its action is that of a digestive and anti-spasmodic. It also possesses anti-lithic properties. It may be used with advantage in dyspepsia, and in some conditions it appears to be the very remedy needed to improve the tone and power of the stomach. Dr. Herpin introduced this preparation as a remedy in epilepsy. His mode of treatment was to begin with two grains daily, and gradually to increase to ten; continuing its use from five to twelve months.

Zinc, Phosphate of

It may be administered in almost every case of debility, supervening any disease unattended with inflammation. It is pronounced superior to other salts of the same metal in the treatment of nervous diseases; and Dr. Barnes, of London, (U. S. D.) "has found it peculiarly useful in the insanity occurring in the convalescence from fevers, in which he associated it with quinia, and in epilepsy, attended with disorder of the uterine functions." He also uses it, preferably to the sulphate of zinc, in the sweats of phthisis.

Dose, one to three grains.

Zinc, Tannate of

Highly useful in affections of the eyes, accompanied with muco-purulent secretions. Thirty grains, in six fluid ounces of water and one-half fluid ounce of mucilage, is the solvent employed as a wash.

Zinc, Valerianate of

Neurotic-tonic and anti-spasmodic. This salt is beneficial in anomalous nervous affections, attended with palpitation of the heart, constriction of the throat, in nervous affections which accompany chlorosis, nervous headache, chorea, &c. Cases of epilepsy are recorded in which cures were effected by this preparation of zinc. In combination, with a small portion of the extract of *belladonna*, it has cured singultus, and that too after a failure of the ordinary remedies.

Given in quantities of three quarters of a grain, two or three times a day, it has been known to effect cures of idiopathic facial neuralgia, which had for years obstinately resisted every other known treatment, both local and general. Dunglison says: "It has been chiefly prescribed in facial neuralgia and hemicrania, which have resisted the ordinary anti-spasmodics and anti-periodics, and M. Devay, in such cases, has found it eminently successful."

This preparation of zinc is useful in the convulsive affections of young children, and in nervous affections generally.

Dose one half to three grains two or three times a day..

MISCELLANEOUS TABLES.

Table Exhibiting the Number of Drops of Different Liquids Equivalent to a Fluid Dram.

Liquid medicines, in small quantities, are frequently estimated by *drops*, which are often incorrectly considered equivalent to a *minim*, or the sixtieth part of a fluid dram. The drop of water and of watery fluids is, on an average, about that size; but this is by no means the case with all liquids. Even in the same liquid the size of the drop varies, according to the shape of the vessel, and of its mouth, from which it is dropped. The following table was compiled by Mr. E. Durand, of Philadelphia.

	Drops.		Drops
Acid, acetic (crystallizable).....	120	Tincture of assafoetida, foxglove, guaiac, and opium.....	120
Acid, hydrocyanic (medicinal).....	45	Tincture of chloride of iron.....	132
Acid, muriatic.....	54	Vinegar distilled.....	68
Acid, nitric.....	84	Vinegar of colchicum.....	78
Acid, nitric, diluted, (1 to 7).....	51	Vinegar of opium (black drop).....	78
Acid, sulphuric.....	90	Vinegar of squill.....	78
Acid, sulphuric (aromatic).....	120	Water, distilled.....	45
Acid, sulphuric, diluted (1 to 7).....	51	Water of ammonia (strong).....	54
Alcohol (rectified spirit).....	138	Water of ammonia (weak).....	45
Alcohol, diluted (proof spirit).....	120	Wine (Teneriffe).....	78
Arsenite of potassa, solution of.....	57	Wine, antimonial.....	72
Chloroform.....	250 to 300	Wine of colchicum.....	75
Ether, sulphuric.....	150	Wine of opium.....	78
Oil of aniseed, cinnamon, cloves, pepper- mint, sweet almonds, and olives.....	120		

Table of the Proportion, by Measure, of Alcohol,
(Sp. Gr. 0.825) Contained in 100 Parts of Different
Wines and Malt Liquors.—By Brande.

Lissa (average).....	25.41	Syracuse.....	15.28
Raisin (aver.).....	25.12	Sauterne.....	14.22
Port (aver.).....	22.18	Burgundy (aver.).....	14.57
Marsala (aver.).....	29.09	Hock (aver.).....	18.68
Madeira (aver.).....	22.27	Hock, old in cask.....	8.88
Sherry (aver.).....	19.17	Nice.....	14.66
Teneriffe (aver.).....	19.79	Barsac.....	18.88
Calares.....	19.75	Tent.....	18.80
Lachryma Christi.....	19.70	Champagne, white.....	18.80
White Constantia.....	19.75	Champagne, red.....	11.98
Red Constantia.....	18.92	Red Hermitage.....	12.82
Lisbon.....	18.94	Vin de Grave (aver.).....	12.87
Malaga (1666).....	18.94	Frontignac.....	12.79
Bucellas.....	18.49	Côte Rotie.....	12.82
Red Madeira (aver.).....	20.85	Gooseberry wine.....	11.84
Cape Muscat.....	18.25	Currant wine.....	20.55
Cape Madeira (aver.).....	20.51	Tokay.....	9.88
Grape Wine.....	18.11	Elder wine.....	9.87
Calcavella (aver.).....	18.65	Orange wine (aver.).....	11.26
Vidonia.....	19.25	Cider (highest aver.).....	9.87
Alba Flora.....	17.26	Cider (lowest aver.).....	5.21
Malaga.....	17.26	Perry (aver.).....	7.26
White Hermitage.....	17.48	Mead.....	7.92
Rousillon (aver.).....	18.18	Burton ale.....	8.88
Claret (aver.).....	15.10	Brown stout.....	6.80
Malmsey Madeira.....	16.40	London porter.....	4.20
Lunel.....	51.52	London small beer.....	1.28
Shiraz.....	15.52		

Table Exhibiting the Composition of the Principal Natural Mineral Waters of Europe and the United States.

I. CARBONATED WATERS, or such as contain an excess of carbonic acid which gives them a sparkling appearance and the power of reddening litmus paper. These waters frequently contain the carbonate of iron, lime and magnesia, which are held in solution by the excess of carbonic acid and which are deposited when the water is boiled, or exposed for some time to the air.

SELTZER.—(*Germany.*)

	In a wine pint.
Carbonic Acid,.....cubic inches	17
Solid contents.	
Carbonate of Soda,.....grains	4
Carbonate of Magnesia,....."	5
Carbonate of Lime,....."	8
Chloride of Sodium,....."	17
Total,.....	29

[BERGMANN.]

PYRMONT.—(*Germany.*)

Temperature 55° F.

	In a wine pint.
Carbonic Acid,.....cubic inches	26
Solid contents.	
Carbonate of Magnesia,.....grains	10.0
Carbonate of Lime,....."	4.5
Sulphate of Magnesia,....."	5.5
Sulphate of Lime,....."	8.5
Chloride of Sodium,....."	1.5
Oxide of Iron,....."	0.6

Total,.....30.6

[BERGMANN.]

SPA.—(*Belgium.*)

Temperature 50° F.

	In a wine pint.
Carbonic Acid,.....cubic inches	18
Solid contents.	
Carbonate of Soda,.....grains	1.5
Carbonate of Magnesia,....."	4.5
Carbonate of Lime,....."	1.5
Chloride of Sodium,....."	0.2
Oxide of Iron,....."	0.6

Total,.....8.8

[BERGMANN.]

MONT D'OR.—(*France.*)

Four springs, the temperature of which, respectively, is 107°, 109°118°, and 52° F.

Madeleine Spring.

	In a Parisian pint.
Carbonic Acid,.....grains	4.64
Carbonate of Soda,....."	6.75
Sulphate of Soda,....."	2.04
Muriate of Soda,....."	5.18
Alumina,....."	2.21
Carbonate of Lime,....."	4.14

Carbonate of Magnesia,.....	grains	1.86
Oxide of Iron,.....	"	0.40
Total,.....		26.72

VICHY.—(*France.*)

The temperature of the different springs, varies from 72° to 114° F. They all contain carbonic acid, carbonates of lime, magnesia, and soda, sulphate of soda, and muriate of soda.

LEBANON SPRINGS.—(*New York.*)

Gases.		Temperature, 73° F.	In a gallon.
Oxygen,.....	cubic inches		2.00
Nitrogen,.....	"	"	8.50
Carbonic Acid,.....	"	"	0.50
Sulphydric Acid,.....	traces.		
			6.00
Solid contents.			
Sulphuret of Sodium,.....	grains		0.02
Carbonate of Soda,.....	"		2.41
Sulphate of Potash,.....	"		1.04
Chloride of Sodium,.....	"		0.96
Carbonate of Lime,.....	"		4.05
Sulphate of Magnesia,.....	"		1.06
Alumina,.....	"		0.45
Oxide of Iron,.....	"		0.94
Silicic Acid,.....	"		8.25
Org. Com.	Glairine,.....	"	0.75
	Baregine,.....	"	0.47
			15.40

[PROF. H. DUSSAUCHE.]

SWEET SPRINGS.—(*Virginia.*)

		Temperature 73° F.	In a quart.
Carbonic Acid,			
Sulphate of Magnesia,	}		
Muriate of Soda,			
Muriate of Lime,		.....grains	12 to 15
Sulphate of Lime,			
Carbonate of Magnesia,			
Carbonate of Lime,	}	.....grains	18 to 24
Siliceous Earth,			
Iron,.....		.....grains	½ to 1

[ROUELLE.]

II. SULPHURETTED WATERS, or such as contain sulphuretted hydrogen, and are distinguished by their peculiar foetid smell, and by their yielding brown precipitates with the salts of lead and silver.

AIX-LA-CHAPELLE.—(*Germany.*)

	Temperature, 110° to 143° F.	In a wine pint.
Sulphuretted Hydrogen, .....	.....cubic inches	5.5

Solid contents.

Carbonate of Soda,	grains	12
Carbonate of Lime,	"	4.75
Chloride of Sodium,	"	5
Total,		21.75

[BERGMANN.]

HARROWGATE, OLD WELL.—(*England.*)

Gaseous contents.

		In a wine gallon.
Sulphuretted Hydrogen,	cubic inches	14
Carbonic Acid,	"	4.25
Nitrogen,	"	8
Carburetted Hydrogen,	"	4.15
Total,		30.40

Solid contents.

Chloride of Sodium,	grains	752
Chloride of Calcium,	"	65.75
Chloride of Magnesium,	"	29.2
Bicarbonate of Soda,	"	12.8
Total,		859.75

WHITE SULPHUR.—(*Virginia.*)

Temperature, 65° F.

Gaseous contents.

		In a wine gallon.
Sulphuretted Hydrogen,	cubic inches	2.5
Carbonic Acid,	"	2
Oxygen,	"	1.448
Nitrogen,	"	3.552
Total,		9.5

Solid contents.

		In a pint.
Sulphate of Magnesia,	grains	5.588
Sulphate of Lime,	"	7.744
Carbonate of Lime,	"	1.150
Chloride of Calcium,	"	0.204
Chloride of Sodium,	"	0.180
Oxide of Iron,	a trace.	
Loss,	"	0.410
Total,		15.276

[PROF. W. B. ROGERS.]

RED SULPHUR.—(*Virginia.*)

Temperature, 54° F.

Gaseous contents.

		In an imperial gallon.
Sulphuretted Hydrogen,	cubic inches	4.54
Carbonic Acid,	"	8.75
Nitrogen,	"	4.25

Solid contents.

Sulphate of Soda, }	grains	1.25
Sulphate of Lime, }		
Sulphate of Magnesia, }		
Carbonate of Lime, }		
Muriate of Soda, }		

In 32 cubic inches

[PROF. W. B. ROGERS.]

SALT SULPHUR.—(*Virginia.*)

Temperature, 49° to 56° F.		In 100 cubic inches.
Gaseous contents.		
Sulphuretted Hydrogen,.....	cubic inches	1.10 to 1.50
Nitrogen,.....	" "	2.05
Oxygen,.....	" "	0.27
Carbonic Acid,.....	" "	5.75
Solid contents.		
Sulphate of Lime,.....	grains	86.755
Sulphate of Magnesia,.....	"	7.883
Sulphate of Soda,.....	grains	9.682
Carbonate of Lime,.....	"	4.445
Carbonate of Magnesia,.....	"	1.434
Chloride of Magnesium,.....	"	0.116
Chloride of Sodium,.....	"	0.683
Chloride of Calcium,.....	"	0.025
Peroxide of Iron, from Protosulphate,.....	"	0.042
An azotized organic matter, blended } with sulphur, about, }	"	4
Earthy Phosphates,.....	a trace.	
Iodine,.....	"	

[Prof. W. B. ROGERS.]

WARM SPRINGS.—(*Virginia.*)

Temperature, 98° F.		In a gallon.
Gaseous contents.		
Sulphuretted Hydrogen,....	cubic inches	0.25
Nitrogen,.....	" "	3.25
Carbonic Acid,.....	" "	1.00
Solid contents.		
Muriate of Lime,.....	grains	3.968
Sulphate of Magnesia,.....	"	9.984
Carbonate of Lime,.....	"	4.288
Sulphate of Lime,.....	"	5.466
Soda,.....		a trace.

Total,.....23.706

[Prof. W. B. ROGERS.]

BLUE SULPHUR.—(*Virginia.*)

Solid contents.—(Amount not given.)	
Sulphate of Lime,	Chloride of Calcium,
Sulphate of Magnesia,	Hydrosulphate of Soda
Sulphate of Soda,	and Magnesia,
Carbonate of Lime,	Protosulphate of Iron
Carbonate of Magnesia,	Iodine,
Chloride of Magnesium,	Sulphur,
Chloride of Sodium,	Organic Matters.

Gaseous contents.—(Amount not given.)

Sulphuretted Hydrogen,	Oxygen,
Carbonic Acid,	Nitrogen.

[Prof. W. B. ROGERS.]

SHARON SPRINGS.—(*New York.*)*White Sulphur.*

Temperature, 48° F.

	In a wine gallon.
Sulphuretted Hydrogen,	cubic inches 20.5
<i>Solid contents.</i>	
Bicarbonate of Magnesia,	grains 24.0
Sulphate of Magnesia,	" 84.0
Sulphate of Lime,	" 85.4
Hydrosulphate of Magnesia and Lime,	" 8.0
Chloride of Sodium and Magnesium,	" 2.7
Total,	149.1

Magnesia Spring.

Temperature, 48° F.

	In a wine gallon.
Sulphuretted Hydrogen,	cubic inches 8.8
<i>Solid contents.</i>	
Bicarbonate of Magnesia,	grains 80.5
Sulphate of Magnesia,	" 22.7
Sulphate of Lime,	" 76.0
Hydrosulphate of Magnesia and Lime,	" 0.5
Chloride of Sodium and Magnesium,	" 8.0
Total,	182.7

III. CHALYBEATE WATERS are characterized by their inky taste, and by striking a blue-black color with an infusion of galls, and a blue color with ferrocyanuret of potassium. The iron is generally in the state of carbonate of the protoxide, held in solution in the water by excess of carbonic acid. By standing, or boiling, the carbonic acid is driven off, and the protoxide, by absorbing oxygen, is precipitated as a hydrated sesquioxide, of an ochreous color.

TUNBRIDGE WELLS.—(*England.*)

<i>Solid contents.</i>	In a wine gallon.
Chloride of Sodium,	grains 2.46
Chloride of Calcium,	" 0.89
Chloride of Magnesium,	" 0.29
Sulphate of Lime,	" 1.41
Carbonate of Lime,	" 0.27
Oxide of Iron,	" 2.22
Manganese, Silica, &c.,	" 0.44
Loss,	" 0.18
Total,	7.61

[SCUDAMORE.]

BRIGHTON.—(*England.*)

	In a wine pint.
Carbonic acid,	cubic inches 2.5
<i>Solid contents.</i>	
Sulphate of Iron,	grains 1.80
Sulphate of Lime,	" 4.0
Chloride of Sodium,	" 1.53
Chloride of Magnesium,	" 0.75
Silica,	" 0.14
Loss,	" 0.19

Total 8.5

[MARCBT.]

SUPPLEMENT TO THE

CHELTENHAM.—(*England.*)*Chalybeate Spring.*

		In a wine pint.
Carbonic Acid,.....	cubic inches	2.05
Solid contents.		
Carbonate of Soda,	grains	0.5
Sulphate of Soda,	"	22.7
Sulphate of Magnesia,	"	6
Sulphate of Lime,	"	2.5
Chloride of Sodium,	"	41.8
Oxide of Iron,	"	0.8

Total,.....73.8

[BRANDE & PARKES.

BEDFORD.—(*Pennsylvania.*)*Anderson's Spring.*

Temperature, 55° F.

		In a wine gallon.
Carbonic Acid,.....	cubic inches	74
Solid contents		
Sulphate of Magnesia,	grains	80
Sulphate of Lime,	"	14.5
Chloride of Sodium,	"	10
Chloride of Calcium,	"	3
Carbonate of Lime,	"	8
Carbonate of Iron,	"	5

Total,.....120.5

[DR. CHURCH.

SCHOOLEY'S MOUNTAIN.—(*New Jersey.*)

Solid contents.

Temperature, 50° F.

In a wine pint.

Muriate of Soda,	grains	0.48
Muriate of Lime,	"	2.40
Muriate of Magnesia,	"	0.50
Carbonate of Lime,	"	7.99
Sulphate of Lime,	"	0.65
Carbonate of Magnesia,	"	0.40
Silica,	"	0.80
Carbonate of Iron,	"	2.00
Extractive,	"	0.92
Loss,	"	0.41

16.50

BALSTON SPA.—(*New York.*)*Sans Souci Spring.*

Solid contents.

Temperature, 50° F.

In a wine gallon.

Chloride of Sodium,	grains	143.788
Bicarbonate of Soda,	"	12.66
Bicarbonate of Magnesia,	"	89.10
Carbonate of Lime,	"	48.407
Carbonate of Iron,	"	5.95
Iodide of Sodium,	"	1.80
Silica,	"	1

Total,.....247.15 [STEELE.

IV. SALINE WATERS comprise those which contain a sufficient amount of neutral salts to give them a marked, and generally a purgative operation. The salts most usually present are the sulphates and carbonates of lime, magnesia, and soda, and the chlorides of calcium, sodium, and magnesium. Iodine and bromine have been found in a few saline springs; and some of them contain carbonic acid and iron, which might entitle them to be classified, respectively, with the carbonated or chalybeate waters.

PLOMBIERES.—(*France.*)

Solid contents.	Temperature, 90° to 144° F.	In a pint.
Carbonate of Soda,	grains	2.16
Sulphate of Soda,	"	2.88
Chloride of Sodium,	"	1.25
Carbonate of Lime,	"	0.50
Silica,	"	1.88
Animal matter,	"	1.50

Total, 9.07

CARLSBAD.—(*Bohemia.*)

Temperature, 165° F.

Solid contents.	In a wine pint.
Carbonate of Lime,	grains 4.15
Sulphate of Soda,	" 41.51
Chloride of Sodium,	" 5.88
Carbonate of Soda,	" 11.76
Lithia, (Berzelius),	a trace

[BERGMANN

SEIDLITZ.—(*Bohemia.*)

Solid contents.

Solid contents.	In a wine pint.
Sulphate of Magnesia,	grains 180
Sulphate of Lime,	" 5
Carbonate of Magnesia,	" 2.5
Carbonate of Lime,	" 0.8
Chloride of Magnesium,	" 4.5

192.8

[BERGMANN.

CHELTENHAM.—(*England.*)

Saline Spring.

Solid contents.	In a wine pint.
Sulphate of Soda,	grains 15
Sulphate of Magnesia,	" 11
Sulphate of Lime,	" 4.5
Chloride of Sodium,	" 50

Total, 80.5

[PARKES & BRANDE.

BATH.—(*England.*)

Temperature, 100° to 106° F

Solid contents.	In a wine pint.
Carbonic Acid,	cubic inches 1.2
Carbonate of Lime,	grains 0.8
Sulphate of Soda,	" 1.4
Sulphate of Lime,	" 9.8
Chloride of Sodium,	" 8.4
Silica,	" 0.2

Oxide of Iron,	a trace.
Total,	15.1

[PHILLIPS]

HOT SPRINGS.—(*Virginia.*)

Temperature, 98° to 106° F.
Solid contents, (the quantity not given.)

Carbonate of Lime,	Sulphate of Lime,
Carbonate of Magnesia,	Sulphate of Soda,
Carbonate of Iron,	Sulphate of Magnesia,

Free Nitrogen.

PROF. W. B. ROGERS.

SARATOGA.—(*New York.*)*Congress Spring.*

Gaseous contents.	In a wine gallon.	
Carbonic Acid,	cubic inches	811
Atmospheric Air,	" "	7
Total,		818

Solid contents.

Chloride of Sodium,	grains	885
Iodide of Sodium,	"	8.5
Bicarbonate of Soda,	"	8.982
Bicarbonate of Magnesia,	"	95.788
Carbonate of Lime,	"	98.098
Carbonate of Iron,	"	5.075
Silica,	"	1.5
Bromide of Potassium,	a trace.	

Total, 597.948

[STEEL.]

SARATOGA STAR SPRING.

Chloride of Sodium,	grains	378.968
Chloride of Potassium,	"	9.229
Bromide of Sodium,	"	565
Iodide of Sodium, or Iodine,*	"	20.000
Sulphate of Potassa,	"	5.400
Bicarbonate of Lime,	"	124.459
Bicarbonate of Magnesia,	"	61.912
Bicarbonate of Soda,	"	12.662
Bicarbonate of Iron,	"	1.218
Silica,	"	1.283
Phosphate of Lime,	a trace	

Solid contents in a gallon, grains 615.685
407.65 Cubic inches Carbonic Acid Gas in a Gallon.

[By PROF. CHANDLER, of Union College.]

SARATOGA.—(*Pavilion Spring.*)

Gaseous contents.	In a wine gallon.	
Carbonic Acid,	cubic inches	359.05
Atmospheric Air,	" "	5.08

Total, 364.08

Solid contents.

Chloride of Sodium,	grains	187.68
Carbonate of Soda,	"	4.92
Carbonate of Lime,	"	52.84
Carbonate of Magnesia,	"	56.92
Carbonate of Iron,	"	8.51
Sulphate of Soda,	"	1.48
Iodide of Sodium,	"	2.59
Alumina,	"	0.42
Silica,	"	1.16
Phosphate of Lime,	"	0.19
Bromide of Potassium,		a trace.

Total, 311.71

[DR. J. R. CHILTON.

SARATOGA.—(*Union Spring.*)

Gaseous contents.

Carbonic Acid,	cubic inches	In a wine gallon. 314.16
Atmospheric Air,	"	" 4.62

Total, 318.78

Solid contents.

Chloride of Sodium,	grains	243.620
Carbonate of Magnesia,	"	84.265
Carbonate of Lime,	"	41.600
Carbonate of Soda,	"	12.800
Carbonate of Iron,	"	5.452
Iodide of Sodium, or Iodine,	"	3.600
Silica and Alumina,	"	1.570
Bromide of Potassium,		a trace.

Total, 392.907

[DR. J. R. CHILTON.

SEA WATER.—(*English Channel.*)

Water,	grains	In 1000 grains. 964.744
Chloride of Sodium,	"	27.059
Chloride of Potassium,	"	0.765
Chloride of Magnesium,	grains	3.667
Bromide of Magnesium,	"	0.029
Sulphate of Magnesia,	"	2.295
Sulphate of Lime,	"	1.407
Carbonate of Lime,	"	0.033

Total, 1000.000

[SCHWEITZER.

V. ACIDULOUS WATERS. This division of Mineral Waters is intended to comprise such as contain a *free* acid, other than carbonic acid. They are, comparatively, of rare occurrence. The following is an analysis of *Sulphuric Acid Springs*, lately brought into notice:

OAK ORCHARD SPRING.—(*New York.*)

	In a gallon.
Free Sulphuric Acid,.....	grains 82.96
Sulphate of Lime,.....	" 39.60
Protosulphate of Iron,.....	" 14.82
Sulphate of Alumina,.....	" 9.68
Sulphate of Magnesia, ...	" 8.28
Silica,.....	" 1.04
Organic Extractive Matters,.....	" 8.28

Total,.....160.62

[Dr. J. R. CHILTON.

The ALUM SPRING of Virginia is also stated to contain free sulphuric acid.

VI. SILICEOUS WATERS. These Mineral Waters are extremely rare, and in those hitherto discovered, the silica appears to have been dissolved by means of soda. The most remarkable of these are the boiling springs of Geyser, in Iceland, of which the following is the analysis, as given by Black.

(*Edin. Phil. Trans.* iii. 95.)

Solid contents.	In a gallon.
Soda,.....	grains 5.56
Alumina,.....	" 2.80
Silica,.....	" 81.50
Muriate of Soda,.....	" 14.42
Sulphate of Soda,.....	" 8.57

Total,.....62.85

DIETETIC PREPARATIONS.

Decoction of Barley ; or, Barley Water.

Take of

Pearl Barley,2 ounces,
Boiling Water.....2 quarts.

Before adding the boiling water, let the barley be well washed. Then boil it to one-half, and strain the liquor. A little lemon juice and sugar may be added if desirable. To be taken *ad libitum* in inflammatory diseases.

Rice Water.

Take of

Rice,.....2 ounce,
Let it be well washed, and add to it—
Water2 quarts.

Boil it for an hour and a half, and then add sugar and nutmeg as much as may be required. To be taken *ad libitum*.

Rice, when boiled for a considerable time, assumes a gelatinous form, and,

mixed with milk, is a very excellent diet for children. It possesses in some measure a constipating property which may be increased by boiling the milk.

Infusion of Flaxseed.

R. Lini, ℥j.

Radici Glycyrrhizæ contusæ, ʒ ss.

Aquæ bullientis, Oij.

Macerate for two or three hours near the fire, in a covered vessel; strain, and add lemon juice sufficient to make it agreeable.

It may be given as a common drink in catarrh.

Decoction of Bran.

Take of

Fresh Wheat Bran 1 pint,

Water 8 quarts.

Boil down one-third, strain off the liquor, and add sugar, honey, or molasses according to the taste of the patient.

Bran tea may be made by using boiling water, and suffering the mixture to stand in a covered vessel for three or four hours.

Mucilage of Gum Arabic.

As an article of diet, the proper proportions are an ounce of Gum Arabic to a pint of boiling water. The solution is allowed to cool before it is used. Gum Arabic is very nutritive, and life can be sustained on it alone for some time.

Sage Tea.

Take of

Dried Leaves of Sage half an ounce,

Boiling Water 1 quart.

Infuse for half an hour and then strain. Sugar and lemon-juice may be added in the proportion required by the patient. In the same manner may be made balm and other teas.

These infusions form very agreeable and useful drinks in fever, and their diaphoretic powers may be increased by the addition of the sweet spirits of nitre or antimonial wine.

Infusion of Malt.

Take of

Ground Malt 1 pint,

Scalding Water 8 pints

Infuse for two hours, and strain off the liquor, to which may be added sugar or lemon-juice, if required.

This was a favorite preparation with the late Dr. Jos. Parrish, in inflammatory fevers.

Milk for Infants.

Take of

Cow's Milk 1 part,

Water 2 parts.

Loaf Sugar as much as may be agreeable.

It is necessary, when children are to be raised by the hand, to dilute the milk. These proportions may be altered, as the child advances in age. The object is to make a diet as near the qualities of the maternal milk as possible.

Rice Gruel.

Take of

Ground Rice 1 ounce,
 Cinnamon..... 1 dram,
 Water..... 1 quart.

Boil for forty minutes, adding the aromatic near the conclusion. Strain and sweeten. Wine may be added if necessary.

Panado.

Take of

Wheat Bread..... 1 ounce,
 Cinnamon..... 1 dram,
 Water..... 1 pint.

Boil them until well mixed, then add a little grated nutmeg and sugar. Wine or butter may also be added if desirable.

Compound Salep Powders.

B. Salep,

Tragacanth,

Sago, of each $\frac{3}{4}$ iv.

Cochineal, 3 ss.

Prepared Oyster-shells, $\frac{3}{4}$ j.

To be carefully mixed and divided into powders of $\frac{3}{4}$ j each. Str one of these powders into a pint of milk, and boil them together for ten or fifteen minutes. To be drank freely in dysentery and diarrhoea.

These are the dysenteric powders of Dr. Castanello. A somewhat analogous preparation which bears the same name, is prepared as follows:—

B. Gum Arabic,

Tragacanth,

Arrowroot,

Sago,

Tapioca, of each $\frac{3}{4}$ j.

Mix them well together, and boil in a pint of milk, flavored with nutmeg or cinnamon. Used as a diet in dysentery, diarrhoea, &c., &c.

Jelly of Carrageen, or Irish Moss.

Take of

Carrageen half an ounce,

Fresh Milk a pint and a half.

Boil them down to a pint; remove any sediment by filtering or otherwise, and then add the requisite quantity of sugar, with lemon-juice, or peach water, to give it an agreeable flavor. To be used freely.

The moss, before being used, should be well washed in cold water to remove its saline taste,

Boiled Flour.

Take of

Fine Flour a pound.

Tie it up in a linen cloth as tight as possible, and after frequently dipping it in cold water, dredge the outside with flour till a crust is formed round it, which will prevent the water soaking into it while boiling. It is then boiled until it becomes a hard, dry mass.

Two or three spoonfuls of this may be grated and prepared in the same manner as arrowroot, for which it forms an excellent substitute.

Chocolate.

Chocolate should be suffered to stand until cold, after having been made in the usual way. The oily parts thus collect on the surface and should be taken off. The liquid should then be boiled again, and sugar, &c. added.

Beef Tea.

Take of

Lean Beef, cut into shreds.....1 pound,
Water.....1 quart.

Boil it for twenty minutes, taking off the scum as it rises. After it grows cold, strain the liquor.

This preparation is more nourishing than ordinary broths, and very palatable.

Hartshorn Jelly.

Take of

Hartshorn Shavings.....4 ounces,
Water.....1 quart.

Boil over a gentle fire until one pint of the water be dissipated. Strain, and add lemon-juice, sugar, and wine.

This forms, either with or without the last-named ingredients, a very nourishing diet for convalescents; and, when mixed with an equal portion of milk, is well adapted to the bowel complaints of children.

Isinglass or fish glue may be used instead of the hartshorn shavings, if preferred.

Calf's Feet Jelly.

Take two calves' feet and add to them one gallon of water, which reduce by boiling to one quart. Strain it, and when cold, skim the fat entirely off. Add to this the white of six or eight eggs well beaten, a pint of wine, half a pound of loaf sugar and the juice of four lemons, and let them be well mixed. Boil the whole for a few minutes, stirring constantly, and then pass it through a flannel strainer.

This forms a very nutritious article of diet for the sick and convalescent. The wine may be omitted or added at option.

Suet Ptisan.

Take of

Sheep's Suet.....2 ounces,
Milk.....1 pint,
Starch.....half an ounce

Boil slowly for half an hour.

This may be used as a common drink in dysentery.

Mustard Whey.

R. Lactis Vaccinæ, Oj.

Sinapis contusæ, ℥j.

Simmer until the caseous part separates, then strain and add—

Vini Albi, f℥vj.

Signa.—A draught of this whey may be taken every hour or two in low fever and in debilitated stomach.

Wine Whey.

R. Lactis Vaccinæ, Oss.

Vini Albi, f℥i. vel f℥ijj.

Boil the milk, then add the wine, and strain. Grate a little nutmeg, and sweeten the clear whey to the taste.

There are few mild stimulants more employed, or more useful than wine whey. Dr. Chapman speaks of it as possessing a kindred action with carbonate of ammonia. The dose to be regulated by the circumstances of the case; from four ounces to ten or more during the day.

Rennet Whey.

Take of
 New Milk 1 quart,
 Rennet..... a large spoonful
 Heat the milk and then add the rennet. Boil until the curd separates and is all taken off.
 To many persons this forms a very agreeable nutriment.

Vinegar Whey.

Take of
 Milk..... 1 pint,
 Vinegar half an ounce.
 Boil for a few minutes, and separate the curd.

Tartar Whey.

Take of
 Milk 1 quart,
 Cream of Tartar half an ounce.
 Boil until the curd separates.

MEDICAL TERMS FREQUENTLY USED.

- 3 Uncia, vel uncia. An ounce, or ounces.
 3 Drachma, vel drachmæ. A drachm, or drachms.
 9 Scrupulus, vel scrupuli. A scruple, or scruples.
 0 Octarius, vel octarii. A pint, or pints.
 3 Fluidrachma, vel drachmæ. A fluidrachm, or—drachms.
 3 Fluiduncia, vel uncia. A fluidounce, or—ounces.
 A. aa. Ana. Of each.
 Abd. Abdom. Abdomen. The belly.
 Abradatur capillitium, or abradantur capilli. Let the hair of the head be shaved off.
 Abs. febr. Absente febre. In the absence of fever.
 Ad alvum solvendam, or movendam. To open the bowels.
 Ad deliquium, or ad syncopen. To fainting.
 Ad dolorem leniendum. To mitigate pain.
 Ad 2 vic. Ad duas vices. At twice taking.
 Ad tres vices. At thrice taking.
 Ad quartem vicem. Up to the fourth time.
 Ad gr. acid. Ad gratam aciditatem. To an agreeable acidity.
 Ad hanc formam, magnitudinem. To this form or size.
 Ad libit. Ad libitum. At pleasure.
 Add. Adde, or Addantur. Add.
 Addendus. To be added.
 Addendo. By adding.
 Ad magnitudinem nucis moschatæ. To the size of a nutmeg.
 Admov. Admoveatur or Admoveantur. Apply.
 Ad saturand. Ad saturandum. Until saturated.

- Ad somnum conciliandum To procure sleep.
 Adst febr. Adstante febre. When the fever is on.
 Ad vomitum concitandum. To excite vomiting.
 —compendium. To allay vomiting.
 Aggred. febr. Aggrediente febre. While the fever is coming on.
 Altern. horis. Alternis horis. Every other hour.
 Alternis noctibus. Every other night.
 Aluta. Leather.
 Alvo adst. Alvo adstricta. When the belly is bound.
 Aq. bull. Aqua bulliens. } Boiling water.
 Aq. ferv. Aqua fervens. }
 Aq. distil. Aqua distillata. Distilled water.
 Aqua fluvialis. River water.
 —pluvialis. Rain water.
 —communis. Common water.
 —fontis or fontana. Spring water.
 —nivalis. Snow water.
 Aqua tost. panis. Toast and water.
 Avellana, ad molem avellanæ. To the size of a filbert.
 Bis ind. Bis indies. Twice a day.
 B. m. Balneum maris. A water-bath.
 Bull. Bulliat. It should boil.
 Bulliant. They should boil.
 B. v. Balneum vaporis. A vapor-bath.
 Calvaria. The skull.
 Cap. Capiat. Take.
 Cerevisia. Beer.
 C. m. Cras mane. To-morrow morning.
 Capill. abrad. Capillitium abradatur. Let the head be shaved.
 Chart. Chartula, vel chartulæ. A small paper, or papers.
 Coch. Cochlear, vel cochlearia. A spoonful, or spoonfuls.
 Coch. ampl. Cochleare amplum. A tablespoonful. About f 3 ss.
 Coch. infant. Cochleare infantis. A child's spoonful. About f 3 iss.
 Coch. magn. Cochleare magnum. A tablespoonful.
 Coch. med. Cochleare mediocre or medium. A dessert spoonful. About f 3 ij.
 Coch. parv. Cochleare parvum. A teaspoonful. About f 3 j.
 Ccerul. Cceruleus. Blue.
 Col. Colatus. Strained.
 Colet. Coletur. It should be strained.
 Colat. Colaturæ. Of, or to be strained liquor.
 Colent. Colentur. They should be strained.
 Collyr. Collyrium. An eye-water.
 Cong. Congius. A gallon.
 Comp. Compositus. Compound or compounded.
 Cons. Conserva. A conserve.
 Conterantur probe. Let them be well rubbed together.
 Cont. med. Continuantur medicamenta. The medicines should be continued.
 Contr. Contritus. Ground to a fine powder.
 Contus. Contusus. Bruised, or broken.
 Coq. Coque. Boil.
 Coquantur. They should boil.
 Cort. Cortex. A bark.
 Coxa. The hip.
 Coxæluvium. The hip-bath.
 Crast. Crastinus. To-morrow.
 C. m. s. Cras. mane sumendus. To be taken to-morrow morning.

- Ocucurbit. cruent.* *Ocucurbitulæ cruentæ.* This expression is used when blood is to be drawn by scarification and cupping.
Ocucurbitulas affigere. To apply cupping glasses.
Cuj. Cujus. Of which.
Cujusl. Cujuslibet. Of any.
Cyath. thesæ. *Cyatho thesæ.* In a cup of tea.
Cyathus. *Cyathus vinosus.* A wine-glass. Contains about $f\frac{2}{3}$ iss.
Deaur. pil. Let the pills be gilded.
Deb. spiss. *Debita spissitudo.* A proper consistence.
Decoc. *Decoctum.* A decoction.
Decoct. hordei. Barley-water.
Decub. *Decubitus.* Of lying down.
De d. in d. *De die in diem.* From day to day.
Dej. alvi. *Dejectiones alvi.* Stools.
Det. *Detur.* It should be given.
Devoret. Let him swallow.
Dieb. alt. *Diebus alternis.* Every other day.
Dieb. tert. *Diebus tertiis.* Every third day.
Digitus. A finger.
Digitus pedis. A toe.
Diluculo. Early in the morning.
Dim. *Dimidius.* One-half.
Dir. prop. *Directione propriâ.* With a proper direction.
Dividatur massa. Let the mass be divided.
Donec. alv. bis dej. *Donec alvus bis deiciat.* Until two stools have been obtained.
Donec. alv sol. fuer. *Donec alvus soluta fuerit.* Until a stool has been obtained.
Donec. alvus probe responderit. *Donec alvus sit soluta.* *Donec alvus commode pergetur.* Until the bowels be well purged or opened.
Donec supervenerit vomitus. Until vomiting ensue, or shall occur.
Durante dolore. During the pain.
Durante dyspnæa. Whilst the difficulty of breathing continues.
Durante paroxysmo. During the paroxysm or fit.
Ejusd. *Ejusdem.* Of the same.
Elect. *Electuarium.* The eluctuary.
Empl. *Emplastrum.* A plaster.
Enem. *Enema.* A clyster.
Enemata. Clysters.
Ex quovis vehiculo crasso. In any thick vehicle or menstrum.
Ex quovis vehiculo idoneo. In any proper vehicle.
Ext. sup. alut. *Extende super alutam.* Spread upon leather.
Ft. pil. xij. *Fac. or fiat pilulas duodecim.* Make twelve pills.
Feb. dur. *Febre durante.* During the fever.
Fel. Bile.
Fem. intern. *Femoribus internis.* On the inner part of the thighs.
Fermentum. Yeast.
Ft. h. *Fiat haustus.* Let a draught be made.
F. s. a. *Fiat secundum artem.* Make according to art.
F. vel. ft. *Fac, vel fiat, vel fiant.* Make or let it be made.
F. venæs. *Fiat venæsectio.* Bleed. Let a vein be opened.
Fiat massa. Let a mass be made.
Fist. arm. *Fistula armata.* A clyster pipe and bladder fitted for use.
Fo. *Fluidus.* Liquid; also by measure.
Fol. *Folia.* Leaves.

- Fonticulus, vel fontinella fiat. Let an issue be established.
 Fotus. A fomentation.
 Garg. Gargarisma. A gargle.
 Gel. quav. Gelatinâ quavis. In any kind of jelly.
 Gelatina ribesiæ. Currant jelly.
 Gelatina vituli. Calves foot jelly.
 Genu. The knee.
 G. g. g. Gummi guttæ gambogiæ. Gamboge.
 Gr. Granum. A grain. Grana. Grains.
 Gtt. Guta. A Drop. Guttæ. Gutt. quibusd. Guttis. quoibusdam.
 With a few drops. Guttat. Guttatim. Drop by drop.
 Har. pil. sum. iij. Harum pilularum sumantur tres. Three of these pills should be taken.
 Haust. Haustus. A draught.
 Hepar. The liver.
 Hirudines applicentur, or admoveantur. Let leeches be applied.
 Horis alternis. Every second hour. Horis tertiis. Every third hour. Hor. decub. Horâ decubitûs. At going to bed. Hor. som. Horâ somni. Just before going to sleep, or on retiring to rest. Hor. un. spatio. Horse unius spatio. At the expiration of an hour. Hor. interm. Horis intermediis. At the intermediate hours between what has been ordered at stated times.
 Impluvium. The shower-bath.
 Ind. Indies. From day to day.
 Inf. Infunde. Pour in.
 Infundibulum. A funnel.
 Infus. Infusum. An infusion.
 Infusum carnis bubuli. Beef-tea.
 Inguen. The groin.
 In impetu effervescentiæ. In the act of effervescence.
 Inj. enem. Injiciatur enema. A clyster should be given.
 In lagenâ bene obturatâ. In a well-stoppered flask.
 In pulm. In pulmento. In gruel.
 In pulv. tere. Rub into a powder. In pulv. subtilam. tere, vel tritura. Rub to a very fine powder.
 Insuperge, or inspergatur paullulum. Spread a little; or let a little be spread.
 Inter effervesendum. During effervescence.
 Inter terendum. During trituration.
 Invadente paroxysmo caloris. When the hot stage is coming on.
 Jecur. The liver. Jecinoris. Of the liver.
 Juglandis instar. The size of a walnut.
 Jusculum avenæ, or avenaceum. Gruel.
 Jusculum pullinum. Chicken-broth.
 Jus vitulinum. Veal-broth.
 Lac asinorum. Asses' milk.
 Lac caprinum. Goats' milk.
 Lat. dol. Lateri dolenti. To the side that is affected.
 Lb. B. Libra. A pound weight, or a wine pint.
 Lumbus. The loin.
 Malleolus. The ancle.
 Maneat in lecto. Let him stay in bed.
 M. Misce. Mix.
 Mensurâ. By measure.
 M. Manipulus. A handful.
 Mane pr. Mane primo. Very early in the morning.
 Mass. Massa. Amass.
 Mic. pan. Mica panis. Acrumb of bread.

- Min. Minimum. The sixtieth part of a drachm measure.
 Mtt. Mitte. Send.
 Mistura. A mixture.
 Mittat. }
 Mittantur. } There should be sent.
 Mitt. sang. ad. $\frac{3}{4}$ xij. saltem. Mittatur sanguis ad uncias duodecim saltem
 Let blood be taken away to twelve ounces at least.
 No. Numero. In number.
 Mod. presc. Modo prescripto. In the manner directed.
 Moles. The bulk.
 Mor. sol. More solito. In the usual manner.
 Multo mane. Early in the morning.
 Nucha. The nape of the neck.
 N. t. s. n. Ne tradas sine nummo. Do not deliver the medicine unless paid for it.
 N. m. Nux moschata. A nutmeg.
 Obturator vas. Let the vessel be stoppered.
 O. Octarius. A pint; sixteen ounces.
 Ol. lini s. i. Oleum lini sine igne. Cold drawn linseed oil.
 Omn. hor. Omni horâ. Every hour. Omn. bid. Omni biduo. Every two days. Omn. bih. Omni bihorio. Every two hours. Omn. man. Omni mane. Every morninning. Omn. noct. Omni nocte. Every night. Omni quadrante horæ. Every quarter of an hour.
 O. o. Oleum olivæ optimum. Best olive-oil.
 Ope. By means of. As, ope pencilli camellini. By means of camel-hair pencil.
 P. Pondere. By weight.
 Palma. The palm of the hand.
 Part. vic. Partitis vicibus. Partitis dosibus. In divided times or doses, instead of all at once.
 Per. op. emet. Peractâ operatione emetici. When the operation of the emetic is finished.
 P. Æ. Partes æquales. Equal parts or quantities.
 Pediluvium. A foot-bath.
 Per bidduum, per triduum. For two or three days.
 Phialâ prius bene agitâtâ. The bottle being first well shaken.
 Pil. Pilula, vel pilulæ. A pill, or pills.
 Pleno rivo. In a full stream.
 Pollux. The thumb.
 Poples. The ham.
 Post. sing. sep. liq. Post singulas sedes liquidas. After every loose stool.
 Ppt. Præparata. Prepared.
 P. r. n. Pro re nata. According to circumstances; occasionally.
 P. rat. set. Pro ratione ætatis. According to the age of the patient.
 Pug. Pugillus. A pinch between the fore finger and thumb.
 Pulv. Pulvis. A powder.
 Pyxis. Pyxida. A pill-box.
 Q. h. 2dâ, } Quaque hora secundâ, }
 vel 3 iâ, &c. } vel tertiâ, &c. } Every 2 or 3 hours, &c.
 Q. p. Quantum placet. As much as you please.
 Q. s. Quantum sufficit. As much as may suffice.
 Quor. Of which.
 R. Recipe. Take.
 Rad. Radix. A root.
 Recidivum. A relapse.
 Red.in. pulv. Redactus in pulverem. Powdered.

Redig in pulv. Redigatur in pulverem. It should be reduced to powder.
Reg. umbil. Regio umbilici. The parts about the navel.

Ren. The kidney.

Repet. Repetatur. It should be continued. Repetantur. They should be continued.

Rectinaculum. A truss.

S. Signa. Write.

Sanguis mittatur, or detrahatur. Let blood be drawn.

S. a. Secundum artem. According to art.

Semicupium. A half-bath, or hip-bath.

Semidr. Semidrachma. Half-a-drachm.

Ss. Semisse. A half—as, Drachma cum semisse. A drachm and a half.

Semih. Semihora. Half-an-hour.

Sesquih. Sesquihora. An hour and a half.

Sesunc. Sesuncia. Sesquiuncia. An ounce and a half.

Sesquidrachma. A drachm and a half.

Setaceum. A seton.

Serum lactis. Whey.

Si n. val. Si non valeat. If it do not answer.

Si op. sit. Si opus sit. If necessary.

Si vir. perm. Si vires permittant. If the strength will allow.

Sgn. n. pr. Signetur nomine proprio. Write upon it the usual name.

Sing. Singulorum. Of each.

Singultus. Hiccough.

Spina dorsi. Spine of the back, back-bone.

St. Stet. It should stand.

Stent. They should find.

Sub fin. coct. Sub finum coctionis. When the boiling is nearly finished.

Sum. tal. Sumat talem. Take one like this

S. v. Spiritus vini. Ardent spirit of any strength.

S. v. G. Sp. Vini. Gallici. French brandy.

S. v. r. Spiritus vini rectificatus. Spirit of wine.

S. v. t. Spiritus vini tenuior. Proof spirit, or half alcohol and half water.

Subinde. Now and then.

Summo mane. Early in the morning.

Sypho. A syringe.

Temp. dext. Tempori dextro. To the right temple.

Tinct. Tinctura. A tincture.

Triit. Tritus. Ground to powder.

Troch. Trochisci. Troches or lozenges.

Ult. prescr. Ultimo prescripto. The last ordered.

Urgenti flatu. Flatulence being troublesome.

Urgenti tusse. The cough increasing.

V. s. Venæsectio. Bleeding from a vein.

Ventriculo jejuno. The stomach being empty.

Vesicatorium applicetur, or admoveatur. Let a blister be applied.

Vit. ov. Vitellum ovi. The yolk of an egg.

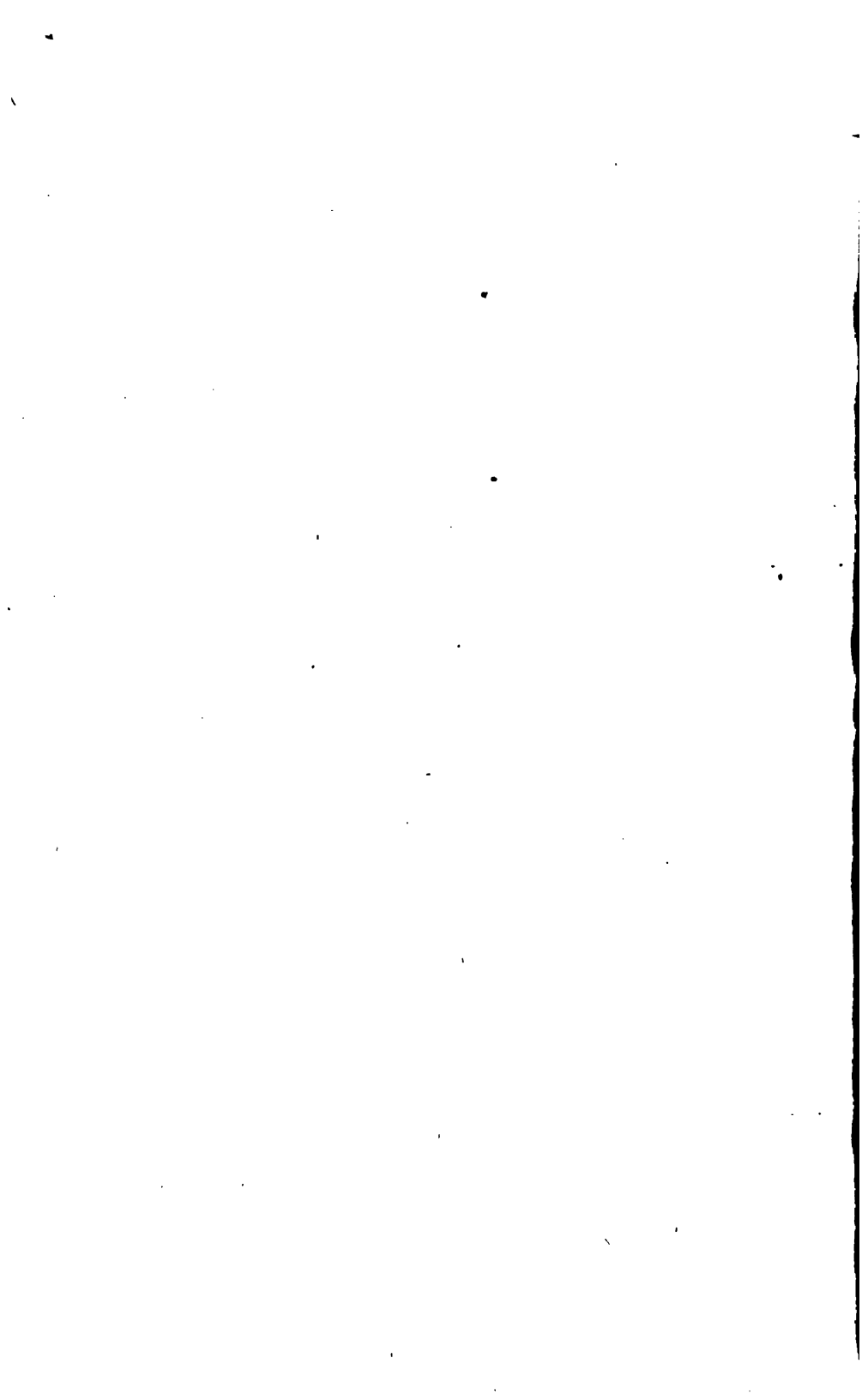
Vasculum pro theâ (a tea cup) contains about $f\frac{3}{4}$ iij.

Vulnus curare. To dress a wound.

V. o. s. Vitello ovi solutus. Dissolved in the yolk of an egg.

Vom. urg. Vomitione urgente. When the vomiting begins.

— suppr. Vomitu suppresso. The vomiting being stopped.



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APPENDIX.

Alterative Syrup

(*Arabæ Compositus.*)

This is one of the most valuable compounds of the Eclectic Dispensatory. It is composed of Honduras sarsaparilla, spikenard, yellow dock, burdock, guiacum, sassafras, prickly ash, elder flowers and blue flag. Each fluid ounce contains 120 grains of the crude articles. Dose one to four fluid drams three times a day.

Aromatic Calisaya Wine.

An agreeable and general tonic in convalescence for children and feeble persons, and prophylactic against intermittents. Valuable as a tonic during the summer months. Each fluid ounce contains the medicinal virtue of twenty-four grains of bark.

Dose, for adults, a wine-glassfull two or three times a day, more or less, as may be necessary; and for children, in proportion to age and constitution.

Buchu and Pareira Brava, Compd. Elixir of

The combination of *buchu*, *pareira brava*, *juniper* and *collinsonia* has been employed with decided success in disease of the urinary organs to which it has a peculiar and specific direction. It has been useful in chronic bronchial inflammation, chronic inflammation of the bladder, ulcerated kidneys, bladder and urinary passages, leucorrhœa, dropsy, &c. It is mild in its operation, prompt as a remedial agent, and an agreeable and safe remedy in these complaints. Dose, a teaspoonful three times a day.

Calisaya, Columbo and Quassia, Elixir of

Anti-intermittent, tonic and stomachic. The ingredients severally, of this Elixir have achieved a wide and merited notoriety in the treatment of dyspepsia, loss of appetite, muscular debility and that depraved state of the system consequent on febrile and inflammatory diseases, in chronic diarrhœa and dysentery. Each remedy enhances the remedial action of the other, and we invite the profession to test this preparation believing it will prove eminently useful and far more efficacious in the more obstinate cases of the above diseases, than the remedies individually.

Each fluid ounce contains twenty grains Calisaya ; fifteen grains of Columbo, ten grains of Quassia. Dose, one to two drams.

Calisaya, Iron and Manganese, Elixir of.

This preparation combines, besides the tonic properties of Bark and Iron with the alterative properties of manganese, the valuable effects of phosphorus, in cases where the system needs its phosphoric constituent in due proportion. Each fluid ounce contains 30 grs. Calisaya and 8 grains each of Phosphate iron and Manganese.

Calisaya and Protoxide of Iron, Elixir of.

This preparation in potency and elegance is second to no similar combination to combat anæmia, female debility and atony of the digestive apparatus. It comports as a general tonic, and in cases when Bark and Iron are indicated, is highly commended by those who have given the medicine a trial. Each fluid dram contains seven and one-half grains of Calisaya and two grains of Citrate of Protoxide Iron. Dose, one to two drams.

Chlorodyne.

Composed of Opium, Chloroform, Cannabis Indica, Hydrocyanic Acid, and Capsicum.

Anodyne, astringent, sedative, diaphoretic and anti-spasmodic.

This preparation is now claiming the attention of the Profession throughout Europe ; and since its introduction into this country has proved to be a valuable addition to our remedial agents. It has been used with the greatest success in cases of *Asiatic Cholera*, when every other mode of treatment had failed. It has also been used with decided advantage in numerous cases of delirium tremens, heart disease, cramp, dysentery, diarrhoea, asthma, epilepsy, croup, &c., &c.

The dose varies in accordance with the severity of the diseases say from five to thirty drops in water, frequently repeated.

Cimicifuga, Elixir of.

This is designed to furnish a preparation of an agreeable taste of less strength than our fluid extract and equal to the tincture. Black cohosh possesses an undoubted influence over the nervous system and has been successfully used in periodical convulsions, epilepsy, asthma, delirium tremens, and many spasmodic affections, in phthisis pulmonalis, cough, amenorrhœa, dysmenorrhœa, leucorrhœa and other uterine affections. It has and always had a high reputation in rheumatism, acute or chronic, and neuralgia.

Cimicifuga Compound, Elixir of.

This is composed of *Cimicifuga*, *Cherry*, *Ipecac*, *Liquorice* and *Seneka*. It is alterative, expectorant and tonic, and stimulates most of the secretions, very useful in pulmonary diseases, its specific influence on the lungs is marked, lessening the frequency and severity of the cough, rendering breathing less laborious and diminishing the frequency of the pulse, also in hepatic disorders and dyspepsia.

Collinsonia Canadense, Elixir of

It is a tonic, astringent, diaphoretic and diuretic. The root in substance is said to irritate the stomach and produce vomiting, even in small doses. It has some reputation in catarrh of the bladder, leucorrhœa, gravel, dropsy, &c. It is also said to have been used with efficacy in lithic acid calculous deposits and other affections of the urinary organs.

Gentian and Pyrophosphate of Iron, Elixir of.

This is the most agreeable form of combining Gentian with Iron, and is a mild chalybeate tonic, particularly adapted to weak and debilitated constitutions, and to persons of a nervous organization. Useful in cases where iron is indicated in conjunction with a bitter tonic, such as dyspepsia, want of appetite, amenorrhœa, hysteria, and has been well spoken of in treatment of rickets and diabetes. Each fluid ounce contains 32 grains Gentian, and 8 grains pyrophosphate Iron. Dose one to two drams.

Ginger, Syrup of.

The syrup of ginger is much used as a warm stomachic addition to tonic and purgative infusions or mixtures and to impart flavor to drinks.

Helonias Compound, Elixir of.

Composed of Michella Repens, Viburnum Opulus, Caulophyllum Thalictroides, Helonias Dioica.

This medicine appears to exert a specific influence on the uterus, and in functional derangements of this organ it is held to be invaluable, acting as a uterine tonic, and gradually removing abnormal conditions, while at the same time it imparts tone and vigor to the reproductive organs. In leucorrhœa, dysmenorrhœa, amenorrhœa, menorrhagia, metrorrhagia, tendency to repeated and

successive miscarriages, and general atony of the generative organs, the utility of this Elixir is extravagantly lauded.

Dose, half a wine-glassful three times a day.

Hypophosphite of Lime, Syrup of

For therapeutic character and value of the Hypophosphites, see page 157. Each fluid dram contains three and one-half grains of the salt. Dose one to two drams.

Hypophosphite of Manganese, Syrup of

For therapeutic character and value of the Hypophosphites, see page 157. Each fluid dram contains two grains of the salt.

Dose one to two drams.

Hypophosphite of Soda, Syrup of

For therapeutic character and value of the Hypophosphites, see page 157. Each fluid dram contains two grains of the salt.

Dose one to two drams.

Iodide Lime and Protoxide Iron, Syrup of

This is a new and elegant form in which to administer Iodide Lime and Protoxide Iron. It is pleasant to the taste and highly efficacious as an alterative and tonic, and advisable in a large number of cases where the secretions are defective, the blood impoverished, where the assimilatory organs imperfectly perform their functions, and the system generally is prostrated from exhausting diseases.

Each fluid dram contains one-half grain Iodide Lime and two grains of Protoxide Iron. Dose one to two drams.

Iodide of Manganese, Syrup of

Iodide of manganese is particularly useful in the anæmia attendant on scrofula, phthisis, cancer, and syphilitic cachexia. The syrup, given in combination with Cinchona rapidly removes the enlargement of the Spleen often following protracted fevers.

Each fluid ounce contains sixty grains of Iodide manganese.

Dose, ten to thirty drops, repeated several times a day.

Iron, Bitter Wine of

It is well adapted to all cases of general prostration where a tonic and mild stimulant are required. Each fluid ounce contains four

grains citrate of iron and the medicinal virtues of sixty grains of bark. Dose, one to two drams.

Ipecac, Syrup of. (U. S. P.)

This syrup is chiefly applicable to the cases of children. One fluid ounce contains the virtues of thirty grains of ipecacuanha. The dose as an emetic, is for an adult from a fluid dram to a fluidounce; for a child, a year or two old, from thirty minims to a fluid dram, repeated every fifteen or twenty minutes till it acts.

As an expectorant, the dose for an adult is twenty minims to a fluid dram; for a child, from two to ten minims.

Lime, Syrup of.

The syrup of Lime remains perfectly transparent, and is in no degree disturbed by dilution with water. It has a decidedly alkaline and even caustic taste, and should always be largely diluted when administered. It is employed in the chronic diarrhoea of infants and recommended as an addition in very small proportions, to the milk employed as a diet for children liable to this complaint. Trousseau adds about eight grains of the syrup to the quart of milk. He gives the saturated syrup of Lime to a child in the quantity of fifteen or thirty grains in the course of the day, to an adult, in five times the quantity. This preparation may be used in diarrhoea with acidity, in vomiting, in affections of the urinary organs requiring active treatment and for all other therapeutical purposes to which Lime is applied.

It is recommended in acute rheumatism, and strong testimony attests its efficacy. Dr. Carl H. Smith in the *Medical and Surgical Reporter*, (June, 1868), says: I have now treated fifteen cases of acute rheumatism with the syrup of Lime, using no other remedy, and the result was a cure in from ten to sixteen days.

Dose, one-half to two fluid drams.

Lithia, Bromide of.

Bromide of Lithia is comparatively a new remedy. It forms a very soluble Salt and possesses extraordinary solvent power. As an eliminant it is largely in demand. It is admirably adapted to cases of gout, gouty diathesis, rheumatism, rheumatico-neuralgia, and to prevent the formation and deposition of insoluble salt of uric acid in the bladder, kidneys, joints and ligamentous tissues, and to favour the solution of such salt when already formed. It is used in cases similar with Carbonate of Lithia, and by many preferred.

Lupulin (Hop), Elixir of

This elegant preparation is intended to be used where opiates are inadmissible. It will aid in producing sleep and relieve pain. It is useful in dyspepsia, nervous tremors, wakefulness in connection with nervous irritation, anxiety or exhaustion. It does not disorder the stomach or cause constipation as opium does.

Pepsine, Strychnia and Bismuth, Ferrated Elixir of

Stomachic, nervo-tonic, and hæmatinic. Admirably adapted to the ordinary cases of dyspepsia and especially when this complaint is complicated with acidity of the stomach, anæmia, loss of appetite, general languor and nervous irritability and prostration.

This valuable combination is eminently useful in a largely diversified class of diseases which will readily be suggested.

Each fluid ounce contains thirty-six grains of Pepsin, $\frac{1}{10}$ of a grain of strychnia, ten grains citrate of Bismuth and four grains citrate of Iron. Dose, one dram.

Syrup Pectoral.

Composed of Dates, Jujube, Liquorice Root, Mallow Root, Maiden Hair, Poppy Heads. Dose, one to two ounces.

Phosphate of Lime, Syrup of

Its uses are similar to those of Syrup of Lime though it is especially adapted to morbid conditions where degeneracy of nerve tissue indicates the utility of Phosphorus. Each fluid dram contains five grains Phosphate Lime. Dose one to two drams three times daily.

Quinia, Phosphate of.

The uses and indications of this preparation are obvious.

The dose varies exceedingly according to the circumstances of the patient, and the object to be accomplished.

Rhei, Syrup of. (U. S. P.)

Syrup Rhubarb is a mild cathartic adapted to the cases of infants, to whom it may be given in the dose of a fluid dram.

Dose for an adult two to three drams.

Rhei, Aromatic Syrup of. (U. S. P.)

Warm stomachic laxative, too feeble for adult cases, but well calculated for the bowel-complaint of infants which are so frequent in the summer season. The dose for an infant with diarrhoea is a

fluid dram repeated, every two hours till the passages indicate by their color that the medicine has operated.

Rhei and Potassium, Syrup of.

Laxative, tonic and alterative. Beneficial in dyspepsia, constipation, hepatic affections, strumous diatheses, and especially when complicated with urinary disorders. Dose one to three fluid drams.

Rumex, Compound Syrup of.

Composed of Rumex Crispus, Solanum Dulcamara, Ampelopsis, Quinq, Scrofularia, Marilandica and Menispermum.

Alterative and anti-scorfulous. Valuable in cutaneous diseases. Dose, one to two fluid drams five times a day.

Sarsaparilla and Iodide Lime, Syrup of.

Alterative. Valuable in strumous affections and the diseases of the absorbent and glandular system.

Each fluid ounce contains two grains iodide lime and sixty grains of sarsaparilla. Dose, two to three drams.

Sarsaparilla and Iodide Potassium, Syrup of.

Each fluid ounce contains thirty grains of iodide potassium and sixty grains of sarsaparilla. Dose, two to three drams.

Sarsaparilla, Compound Syrup of. (U. S. P.)

Dose, from two to four fluid drams, three or four times a day.

Seneka, Syrup of. (U. S. P.)

It affords a very convenient mode of exhibiting seneka in pectoral complaints. It may be given as a stimulant expectorant in the dose of one or two fluid drams.

Syrup Squills Compound. (U. S. P.)

Emetic, expectorant and frequently cathartic, well known as the popular remedy called Hive Syrup. It combines the virtues of seneka, squills, and tartar-emetic, of the last of which it contains one grain in every fluid-ounce.

It may be given with advantage in mild cases of croup, in the latter stages of severe cases when the object is to promote expectoration, and in other pectoral affections in which the same indication is presented.

The dose of this syrup is for children, from ten drops to a fluid dram, according to the age, and should be repeated in cases of croup every fifteen or twenty minutes till it vomits.

As an expectorant for adults, the dose is twenty or thirty drops.

Squills, Syrup of. (U. S. P.)

This syrup is much employed as an expectorant, especially in combination with a solution of tartarized antimony. Sometimes given in infantile cases of catarrh and other pectoral complaints.

Dose, from one to two fluid drams.

Stillingia, Elixir of

In large doses it is emetic and cathartic, in small doses alterative with marked influence over the secretions, *which is unsurpassed by any other known alterative*. It acts permanently on the glandular and cutaneous system, and has proven highly valuable in scrofula, cutaneous diseases, chronic hepatic affections, secondary syphilis in bronchial and laryngeal affections, as well as in obstinate cases of rheumatism, and other complaints ordinarily benefited by an alterative. Dose, one to four fluid drams, three times a day.

Stillingia, Compound Elixir of

This preparation contains *stillingia, turkey corn, blue flag, prickly ash, bitter sweet, princess pine and iodide of potassium*, all well known and esteemed remedies, and is regarded by all who have used it as one of the most potent remedies in all chronic diseases. It is eminently fitted for the legion of disorders which require alterative treatment, prickly ash stimulates and imparts strength to the mucous tissues and proves valuable to the system generally. Dose, one to two fluid drams three or four times a day.

Syrup Stillingia.

Each fluid dram contains twelve grains stillingia and four grains of prickly ash. Dose, one to four drams.

Syrup Stillingia Compound.

Stillingia, Rumez, Chimaphilla, Iris Versicolor, Coriander, Corydalis, Xanthoxylum, Sanguinaria.

Alterative and tonic. For its remedial utility see the properties of the individual articles. Dose, one to two drams.

Wine of Wild Cherry and Iodide of Iron.

Alterative, hæmatinic, tonic and arterial sedative, combining the valuable properties of Iodine, Iron and Wild Cherry held in solution in pure Sherry Wine. In the management of diseases where it is desired to produce a salutary change in the disease, but without exciting any sensible evacuations or cardiac action, and at the same time to impart to the blood its hæmatinic element, and to the digestive organs tone, and thereby to combat general atony, this new and elegant preparation is confidently recommended. Its reparative action on the system of nutrition, and its anti-anæmic influence render it applicable to a largely diversified class of disease.

Each fluidounce contains eight grains of Iodide of Iron.

Dose, one fluid dram three times daily.

Wine of Wild Cherry and Iodine.

Alterative, tonic, stomachic and arterial sedative, and operating as a general excitant of the vital actions especially of the absorbent and glandular systems. In the numerous cases of debility consequent on diseased glands or absorbents, particularly when there is cardiac complication, in glandular enlargements and morbid growth occurring in persons of a delicate constitution and of a scrofulous diathesis, in ovarian tumors, in enlargements and indurations of the liver, spleen, mammæ, testes and uterus, especially when symptoms of constitutional decline have set in, and in many types of hepatic affections, this new remedy appears to be pre-eminently indicated. If symptoms of iodism arise, the medicine should be discontinued, and milk diet prescribed. Each fluid ounce contains two grains of Iodine. Dose, one fluid dram three times daily.

Zinc, Elixir of Valerianate of.

Advisable in all cases where the salt is indicated. In this elixir the offensiveness of the salt is effectually disguised, and the medicine is thereby rendered both acceptable to the stomach and easy of administration. Each fluid dram contains half a grain of Valerianate of Zinc. Dose, one to two drams.

Rhei and Columbo, Elixir of.

Valuable in dyspepsia and indigestion, and may be employed in most cases where the same, combined with Iron, is recommended, but when it cannot be tolerated by the patient. Each fluid ounce contains 16 grains Rhei and 16 gra. Columbo.

Ammonium Chloride Granulated.

Acid Lactic.

Acid Phosphoric, dil. U. S. P.

Zinc Chloride Granulated.

Additional Preparations.

Fluid Extract Buchu U. S. P. with Pepsine and Bismuth, in Dyspepsia.

The stimulating influence of Buchu upon the mucous membrane of the stomach and bowels has given it reputation in Dyspepsia. It augments the appetite and promotes digestion. In combination with Pepsine and Bismuth when there is a deficiency of gastric secretion, its beneficial effects are decided and really wonderful. In atonic dyspepsia complicated with urinary diseases, it tends to prevent the mal-assimilation of the food and consequent generation of sedimentary deposits in the urine, while the diuretic property holds the latter in solution, and favors its discharge.

Each fluid ounce contains 40 grains Pepsine and 4 grains Citrate of Bismuth.

DOSE—A teaspoonful once in three hours.

Fluid Extract Buchu (U. S. P.) and Iron.

Buchu is gently stimulating, antispasmodic and tonic, with a peculiar tendency to diseases of the urinary organs, as Gravel, Chronic Catarrh of the bladder, Irritation of the bladder and urethra, Incontinence of urine, from a loss of tone in the parts concerned in its evacuation. Combined with Iron it is valuable for those cases where it is desired to unite a tonic with the stimulant, diuretic and diaphoretic action of Buchu, and has been serviceable when other preparations have failed.

Each ounce contains eight grains of Pyrophosphate of Iron.

Elixir Bismuth and Strychnia.

This preparation unites the valuable properties of Ammonio-citrate of Bismuth, with those of Strychnia.

Each fluid ounce contains of Ammonio-citrate of Bismuth, 8 grains, and Strychnia, $\frac{1}{10}$ of a grain.

Elixir Bismuth, Quinia and Strychnia.

This preparation unites the properties of Ammonio Citrate Bismuth, with those of Quinia and Strychnia; it is particularly valuable in cases of general debility, nervous prostration, &c. As a tonic it gives increased tone to the stomach, and vitality to the system generally. Each fluid ounce contains Ammonio-Citrate Bismuth 8 grs., Quinia 4 grs., and Strychnia $\frac{1}{10}$ or a grain.

DOSE—One fluid dram.

Elixir Citrate Lithia.

Particularly adapted to cases where a solvent for uric acid is desired, such as gout, kidney and bladder diseases; it is an antacid, antilithic and diuretic and has the advantage over the other salts of Lithia in being more readily assimilated and less disposed to irritate the stomach.

Each fluid ounce contains 20 grains of the salt. DOSE—One to two drams.

Elixir Chloral Hydrate.

Chloral Hydrate should in all cases be administered by a physician. It is contra-indicated when Nux Vomica, Ignatia, or Strychnia are being administered. Each fluid dram contains 5 grains.

Elixir of Calisaya, Pepsine and Bismuth.

A pleasant and efficacious remedy in debility of the stomach attendant on convalescence and certain exhausting diseases, in dyspepsia and in kindred diseases.

Each fluid ounce contains 30 grains of Calisaya, 40 grains Pepsine, and 6 grains Ammonio-citrate of Bismuth. DOSE,—One teaspoonful.

Ferro-Phosphorated Elixir of Gentian.

This preparation is identical in strength with the compound infusion of Gentian of the U. S. Pharmacopœia, with Pyrophosphate of Iron added. Gentian gives tone to the digestion, improves and strengthens the appetite. With the preparation of iron, it is acceptable to the stomach and unites the valuable properties of phosphorus.

Each fluid ounce contains 40 grains Gentian, and 1 grain Pyrophosphate of Iron. Dose, for adults, one to two fluid drams.

Elixir Gentian.

Elixir of Matico.

(PIPER ANGUSTIFOLIUM.)

Matico is an agreeable aromatic, tonic and stimulant, having a tendency, like cubebs, to act on the urinary passages. Used with advantage in diseases of the mucous membranes, as gonorrhea, leucorrhea, hemorrhagia, catarrh of the bladder, hemorrhoids, hemoptysis, dysentery, hematuria, &c. Dose,—1 to 3 fluid drams.

Elixir Mandrake Compound.

Useful in scrofulous and syphilitic diseases, hepatic affections, dysmenorrhea, rheumatism, gonorrhea; also administered beneficially in jaundice, dropsies, dysentery, diarrhoea, bilious, remittent and intermittent fevers, puerperal fever, typhoid fever, and all glandular enlargement.

Each fluid ounce contains 24 grains Senna, 12 grains Mandrake, 8 grains Jalap and 1 gr. Ginger. Dose—One-half to three drams.

Elixir Pepsine, Strychnia & Bismuth with Pancreatine.

A pleasant and efficacious remedy in debility of the stomach attendant on convalescence in dyspepsia and other exhausting diseases. The Pancreatine is claimed to act specially on the digestion of oily or fatty substances.

Each fluid dram contains 5 grains of Pepsine, $\frac{1}{2}$ of a grain Strychnia, 1 grain Ammonio-Citrate Bismuth, and 5 grains of Pancreatine. Dose—One teaspoonful.

Elixir Pepsine & Bismuth with Pancreatine.

A pleasant and efficacious remedy in debility of the stomach attendant on convalescence in dyspepsia and other exhausting diseases. The Pancreatine is claimed to act specially on the digestion of oily or fatty substances.

Each fluid dram contains 5 grains of Pepsine, 1 grain Ammonio-Citrate Bismuth, and 5 grains of Pancreatine. Dose,—One teaspoonful.

Elixir Protoxide Iron & Iodide Potassium.

This preparation is pleasant to the taste and highly efficacious as an alterative and tonic, and advisable in a large number of cases where the secretions are defective, the blood impoverished, where the assimilatory organs imperfectly perform their functions, and the system generally is prostrated from exhausting diseases.

Each fluid dram contains one grain Iodide Potassium, and two grains of Protoxide Iron. Dose,—One to two drams.

Elixir Pink Root Compound.

Cathartic and vermifuge. This compound is decidedly a pleasant and efficient medicine in those states of the system produced by worms, which resemble infantile remittents and other febrile diseases.

Each fluid ounce contains 30 grains Pink Root, 24 grains Senna, 1 1-2 grain Savin and 8 grains Manna. Dose,—One-half to three drams.

Elixir Senna Compound.

A combination of Senna Jalap and Mandrake, operating as a mild cathartic and alterative.

Each fluid ounce contains Senna 20 grains, Jalap 10 grains and Mandrake 10 grains. Dose,—Two to four fluid drams.

Elixir Valerian.

Useful in subduing nervous and convulsive excitement, restlessness and irritability occurring in hysterical constitutions. Also valuable in mania, melancholy and all hallucinatory affections.

Each fluid dram represents 10 grains of the root. Dose,—From one to two drams.

Syrup Bromide Morphia.

Bromine favors the sedative action and at the same time allays the astringency which Morphia induces. It can be used in similar doses and can be repeated more frequently than the organic salts without producing those after effects of an opiate. In cases of extreme depression of a nervous kind attended with headache and nausea, it has been used with great success where other salts of morphia failed.

Each fluid dram contains $\frac{1}{2}$ of a grain Bromide Morphia. Dose —From one to two drams.

Syrup Bromide Quinia.

This preparation is highly recommended in a large number of cases where the organic salts of Quinia cannot be tolerated owing to what is called cinchonism. It has been used with marked results in cases of recurring rheumatism, ulceration of the fauces, nervous exhaustion, loss of appetite and other diseases of the same class, which follow upon syphilis.

Each fluid dram contains one grain of the salt. Dose,—From one to four drams.

Syrup Bromide Strychnia.

Dr. Richardson of London asserts, "I am satisfied from experiment that Bromine reduces or rather subdues and prolongs the action of strychnia on muscular motion."

This salt has rendered unquestionable service in cases of Dyspepsia, partial organic nervous paralysis. And where there is a loss of appetite with congestion of the liver accompanied by giddiness and irritability followed with diarrhoea, it has been used with marked success.

Each fluid dram contains $\frac{1}{2}$ of a grain Bromide Strychnia. Dose,—From one to two drams.

Syrup Bromide Quinia and Morphine.

This combination has been used with remarkable success in four classes of diseases, viz: neuralgic fevers, cerebral irritation, diabetic phthisis and extreme acute attacks of intermittent pulse. the result of nervous shocks. In acute neuralgia it will effectually remove pain without inducing deep narcotism, it rarely causes nausea and interferes but little with the appetite. In diabetic phthisis, the cough is relieved, digestion promoted, and the quantity of sugar and fluids excreted by the urine decreased.

Each fluid dram contains 1 grain Bromide Quinia, and $\frac{1}{8}$ of a grain Bromide Morphia. Dose,—From 1 to 2 drams.

Syrup Bromide Quinia, Morphine & Strychnia.

Used in cases of nervous pains with want of organic action in the digestive organs, neuralgic fevers, paralysis, and that class of diseases occurring from nervous derangement, when at the same time a tonic and sedative are indicated.

Each fluid dram contains 1 grain Bromide Quinia, $\frac{1}{8}$ grain Bromide Morphia, $\frac{1}{16}$ of a grain Bromide Strychnia. Dose,—From $\frac{1}{2}$ to 1 dram.

Syrup Bromide Strychnia and Morphine.

Bromine subdues the action of Strychnia on muscular motion, favors the sedative action, and allays the astringency of Morphia. This combination has been used with good results in cases of nervous pain, with want of organic action in the digestive organs.

Each fluid dram contains $\frac{1}{16}$ of a grain Bromide Strychnia, $\frac{1}{8}$ of a grain Bromide Morphia. Dose,—From one to two drams.

Syrup Lacto-Phosphate of Lime.

This article possesses all the properties of Phosphate of Lime, the Lactic acid acting as a means of absorption. M. Dusart, the eminent French Physiologist asserts it to be far superior to the Phosphate, and to excel all agents yet tried for stimulating the functions of nutrition, especially in infantile cases where these functions are so often deranged.

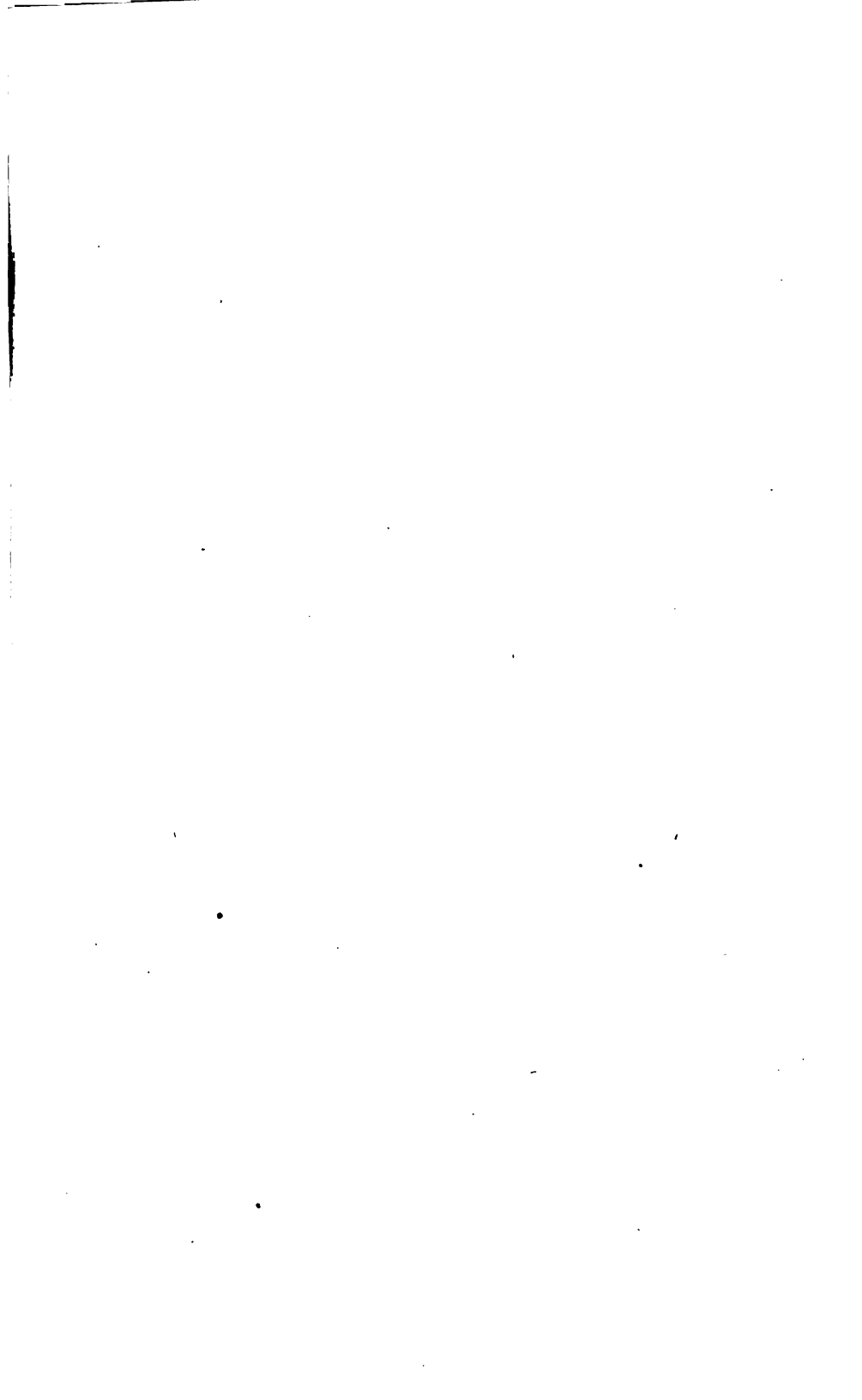
Each fluid dram contains two grains Lacto phosphate Lime, with an excess of Lactic acid. Dose,—From one-half to two drams, according to age.

Syrup Wild Cherry.

Syrup Aurantii Cortex.

Syrup Protoxide Iron.

5 grains Iron to each dram.—Dose, 1 dram.



SCROFULOUS

AND

Cancerous Diseases,

TREATED WITH THE

Iodo-Bromide of Calcium Compound

(LETTERS FROM PHYSICIANS.)



TILDEN & CO.,

New Lebanon, and 176 William St., New York.

Elixir Iodo-Bromide Calcium Compound in Scrofula.

From the Journal of Materia Medica, February, 1874.

BY DR. X. T. BATES.

There is no disease or class of diseases that has more engaged the attention of medical men than that known as "Scrofula." In so many cases daily brought under observation, it seems to baffle all the efforts that medical skill can bring to bear, to effect a cure and eradicate its poison from the system, conveying with it the hereditary taint.—All authorities concur in the opinion that it has its origin in the foetal state, and that the germ of this terrible malady thus planted, is developed in after life by insufficient or improper regimen, exposure to impure or vitiated air; or by careless neglect of the simplest rules of hygiene. It may remain dormant in the system for years in the absence of the requisite exciting causes, such as perhaps dissipated habits; insufficient nutrition, vaccination, or some prolonged and prostrating illness. It will manifest itself sooner or later, and all experience teaches us that it is at once the most insidious and the most difficult to treat successfully, of all the "ills that flesh is heir to." Scrofula has been differently defined by different authors. Some define it to consist essentially of inflammation of the lymphatic ganglion, especially of the neck, as for instance by Dr. A. FLINT who says:

A tuberculous deposit, within the lymphatic glands, especially the superficial glands of the neck, characterizes the affection called *scrofula* or *scrofulosis*. A truly scrofulous deposit is, in fact, identical with the tuberculous. And in the progress of the scrofulous affection of the glands of the neck, we have represented the natural history of the tuberculous exudations in other situations. The deposit remains in these glands for an indefinite period, apparently in a quiescent state, and it may be removed by absorption, but if not absorbed, softening occurs with little or no inflammation, ulceration of the integument ensues, and the liquified product is disorged. Finally after a variable period, cicatrization takes place, leaving an irregular, puckered scar. The same series of events may take place in the bronchial glands, giving rise to what has been called *bronchial phthisis*; and essentially, the same series occurs in pulmonary tuberculosis.

It again has been defined a morbid condition of the whole system of nutrition and hence ought to be classed amongst the cachexiæ—the inflammation and enlargement of the glands, like the eruption in *variola rubeola*, &c., being merely the attendant phenomena.

The internal organs are apt to be attacked, in those of a scrofulous diathesis; and hence, they are often the subjects of phthisis and mesenteric affections and a legion multitude of distressing maladies, which too often from the very moment of germination, to that of termination of existence, go on apparently unchecked, in their destructive and painful work, defiantly resisting the influence of every remedy that may be called into requisition. Adopting the theory that scrofulosis is a peculiar morbid condition of the whole system of nutrition, and recognizing the aggravating part it may place in the whole category of diseases, acute and chronic; not only are we directed to constitutional treatment in the management of scrofulous parts, but as well in our efforts to combat almost every type of sickness in a strumous subject. Bearing in mind the fact that the different con-

ditions of those "afflicted with this disease, necessitate different methods of treatment; all cases demand the employment of those true means which tend to communicate vigour to the constitution and which increase that power of resisting the occasional cause of disease and repairing the injuries of the frame, a power which it is the remarkable characteristic of the scrofulous constitution, to be devoid of, or to possess, in a very imperfect degree." And I believe that no single remedy, or combination of remedies, which the chemist has prepared for our use, possesses this anti-scrofulous power to so preëminent a degree as the "Elixir Iodo-Bromide of Calcium Comp."

I have now used the Elixir Iodo for more than three years, and have found it by far the most efficacious of any remedies which I have heretofore been in the habit of prescribing in strumous affections and strumous complications. But immediate results must not be expected; it is only by long perseverance that the accomplishment of the desired object ordinarily can be obtained even when the attainment of that object lies within the reach of the "Iodo." In the fall prior to its introduction to the Profession, it was submitted to me for trial, the results of which were so exceedingly gratifying as to induce me at once to give it more extended use, which has convinced me that it possesses no ordinary anti-strumous properties.

The test, to which I then subjected it, was caries of the femur and tibia, of long standing, in an anæmic subject of feeble and attenuated frame, a case which had been treated to no effect, by both ferruginous tonics, stomachics and alteratives, and which was regarded, perhaps, hopelessly incurable. Under the use of this Elixir an improvement at once manifested itself, and uninterruptedly progressed until a complete cure was effected. Subsequently I prescribed it in a similar case, with very similar results.

While the management of scrofulous patients in respect of air, exercise, clothing, diet, as well as medicinal agents must be varied to meet the exigencies of each individual case, there is conceded to be one constitutional course of treatment for all cases. Iodine and the Iodides have been vaunted for this purpose, and the practice of every physician of the present day, corroborates the testimony adduced by referring to the past, and confirms beyond a doubt the theory of our acknowledged teachers. Bromine and the Bromides have all been largely used with very beneficial results, while Conium at one time obtained considerable celebrity for its anti-strumous virtues.

In the Elixir Iodo-Bromide of Calcium Compound, we have all these valuable agents combined in an alterative and palatable Elixir, rarely obnoxious even to the most delicate stomach. Iron, Iodine, Bromine and Chlorine enter into it as do also Potassium, Sodium, Magnesium and Lime, and several valuable alteratives which compose the Sarsaparilla Comp., as prepared by Messrs. Tilden & Co. Theory certainly must give this Compound a preference over any one of its constituents, and as far as my observation has extended, practice demonstrates the truth of that theory, and I have no hesitation in recommending it to the Profession as an invaluable anti-strumous agent, one capable of reaching cases positively beyond the influence of any other single remedy. I will here give an epitome of a few cases in which I have successfully used it, all of which are subjects of a scrofulous diathesis.

CASE I. *Scrofulous Induration of the nose*—Situated in the right naris; twelve months standing; so large as to disfigure the face, accompanied with intolerable burning and itching sensations; had obstinately resisted every method of medication (which were manifold) to which she had been subjected; and which I learned combined both discutient topics and alterative. Prescribed. \mathfrak{R} Elixir Iodo-Bromide of Calcium Compound, Oj. S.

Take one teaspoonful, one hour before each meal, in half a wine-glass of water—after one week increase the dose to two teaspoonfuls. This was sufficient to effect a cure, which I shall pronounce permanent, inasmuch as there has been no return of her difficulty since its disappearance, more than two years since.

CASE II. *Piles*.—M. C., aged 52,—and confined to bed for one year, suffering from acute inflammatory rheumatism. Appetite poor, countenance cachectic; occasional vomiting; foul breath; foetid odor in room; bowels confined, and secretions scanty; while the mental depression quite equalled the physical prostration. The odor so offensive and countenance so cachectic as to mislead the attending physician in regard to the complication while the active disease was readily recognized. Cancer of the liver was suggested, and again scirrhus affection of the rectum. I attributed one cause at least of his physical exhaustion and cachexia to be the malarial influence, arising from the very offensive and sickening discharge, consequent on bloody piles. Here the Bromo-Chloralum was called into requisition and proved itself signally efficient in completely removing the odor and purifying the air. Hope of getting relief from the rheumatic affection had quite deserted him, and he solicited only a cure for the piles. Prescribed. \mathcal{R} Elixir Iodo-Bromide of Calcium Compound. *Oj*.

One teaspoonful in half a wine-glass of water, an hour before each meal; after two week's time double the dose. In the course of a month, patient began to experience considerable relief and the system generally to recuperate. Continued to improve until the piles quite succumbed.

CASE III. *In Deafness Resulting from Scarlet Fever*.—During an epidemic of Scarlet Fever, Mrs. W., was attacked by this malady and in the convalescent state discovered that her hearing had become somewhat impaired. This impairment gradually increased until fears were entertained both by herself and friends that she would ultimately lose her hearing entirely. At the suggestion of her husband whom I had previously treated for a similar disorder, she was induced to try the following prescription: \mathcal{R} Elixir Iodo-Bromide Calcium Comp., *Oss*.

Sig.—One teaspoonful in half a wine-glassful of water, one hour before each meal.

Improvement soon manifested itself, and in a few weeks a thorough cure was effected.

I recently had the pleasure of seeing this patient and was informed by her that she alone of several who were similarly affected had escaped permanent deafness—a result to be attributed entirely to the use of the Elixir.

Elixir Iodo-Bromide of Calcium Comp., in Cancer.

Messrs. TILDEN & Co.:

It is with pleasure that I am able to give you very encouraging information concerning the case of *CANCER*, referred to in my previous letter. The case of Mrs. Teresa Augustine, colored, aged 52, a widow, under the care of Dr. O. S. Paine. She first noticed the growth in 1867,—situated in the roof of the mouth, at the arch of the palate, it grew rapidly for nearly a year and was pronounced cancer. In 1868, Dr. Miner in charge of a City Dispensary, skillfully removed it with the knife, holding the patient under an anæsthetic for nearly three hours, it being so difficult to operate without suffocation during the anæsthesia. Dr. Miner attended the patient daily for four months, until the surface healed; with the hope that a radical cure had been effected, however, in a short time it began to grow again from the same fibres, and about two months ago had reached the size of a half hen's egg, nearly filling the mouth. It sloughed and became an open, raw, bleeding, foetid sore, about this time she was admitted to the Hospital.

The surface of the sore was as large as a silver dollar; voice lost, or rather could not speak, great debility.

I was invited by Dr Paine, Surgeon of St. Elizabeth's Hospital, to see this and other cases in their wards. I urged the use of the Iodo-Bromide of Calcium Comp., both Elixir and Solution in this case, citing my success with it. The case had been given up and was regarded hopeless. Dr. Paine kindly accepted the suggestion, and I sent to your House in William St., for these preparations to be sent to the Hospital, and she was at once put upon their use; the diluted Solution as a gargle and the Elixir given internally, a teaspoonful in water three times a day. From that day there has been an appreciable improvement observed, I might say daily. She has now been under this treatment three weeks, *the sloughing surface is entirely healed, no factor*; good appetite and sleep; in all respects a remarkable improvement, and to the astonishment of Doctor Paine and myself, there is every prospect of a cure. The same treatment will be continued, and as this is a case of great interest to the profession, those who desire to do so, are courteously invited to call and see it, at St. Elizabeth's Hospital, 225, West 31 St., Dr. O. S. Paine, Surgeon.

Respectfully Yours,

New York, No. 43, 31st St., Dec. 5th, 1873 WALTER M. FLEMING, M. D.

Letter from Dr. O. S. PAINE.

Messrs. TILDEN & Co. :

New York, December 10th, 1873.

Gentlemen—The patient, concerning whom Dr. Fleming wrote you, is improving daily. She entered the Hospital *expecting to die* with *CANCER*—Scirrhus—of the hard palate. It was of such bulk as to impede mastication and deglutition. The tumour had gone on to ulceration, attended with a fetid discharge, with pain peculiar to this disease. Her health had begun to fail; spirits depressed, &c. It had been removed with the knife in 1868; therefore, on its reappearance, all hope was abandoned.

She has been using the "Elixir Iodo-Bromide Calcium Comp." one month with the following results:—The tumour has disappeared more than one half; there is no ulceration or discharge whatever; at the present time she can eat solid food—whereas before she could receive it in a liquid state only; now she can speak as well as ever. When she first entered the Hospital she could not be understood, the tumour filling the mouth so completely; now she is up and about all day, seemingly well, while before she cared only to sit up at intervals—long enough to have her bed made.

Should you come to New York, I would be happy to see you at my office; and take you to the Hospital to show you the wonderful improvement in the cases. I am using the medicine in several other cases, and will report the results to you be they favorable or otherwise. I am now prescribing it in my private practice; and with the assurance of the highest value it contains.

Very Respectfully, O. S. PAINE, M. D.

January 17, 1874.

We called upon Dr. Paine, at the Hospital, and saw this case; it had completely healed. There was remaining simply an enlargement of the parts, which we were informed was gradually lessening. She is able to exercise out of doors, and stated—her general health was better than it had been for a year or more previous. We advised the continuance of the Elixir until the system was thoroughly renovated, to prevent a recurrence.

TILDEN & CO.

NOTE.—We called at the St. Elizabeth Hospital, and learned, from Dr. Paine, that to test the efficacy of the "Iodo" he suspended its use for two weeks, when an enlargement of the parts was perceptible. He immediately returned to its use, with an almost immediate disappearance of the unpleasant symptoms and enlargement. This was sufficient to satisfy him as to the necessity of its continued use, until all germs of the disease were eradicated from the system.

We saw, there, another case of cancer of the breast, which was progressing favorably; and proved, in time, as good a result as the other, which Dr. Paine promises to report.—*Journal of Materia Medica*, MARCH 2, 1874.

April 10th. Called at the Hospital, Mrs. AUGUSTINE had left and gone to work.

The French woman, over 70 years of age, referred to above with Cancer of the breast, has so far recovered as to intend to leave the next day. The cancer when we first saw it was over six inches in circumference, deep and ugly—at this time it is nearly healed and healthy, and daily improving in appearance.

Letter from Mr. Tilden to Dr. Paine, Concerning a Case of Lupus, and other Cases.

Dear Sir—I have your esteemed favor of the 22d, and am pleased to learn the favorable progress of the Scrofulous, Cancerous, and other cases under the use of the Elixir Iodo Bromide Calcium Comp., and hope they will make the same progress to a practical cure, as in the case of Mrs. Augustine, which certainly exceeds any that has come under my observation. It not unfrequently occurs that a valuable remedy obtains a prejudice by claiming for it too diversified medical powers; in this, we believe, we have thoroughly tested its value in scrofula, scrofulous sores and abscesses, and that class of chronic cases of a scrofulous diathesis which the usual remedies so often fail to reach, as well as to combat those pathological conditions on which a large number of cutaneous affections depends.

We have, also, well attested evidence concerning its action upon the lymphatic glandular system, causing a reduction or absorption of glandular and other tumors. In cancerous cases, *while no remedy can, with propriety, be recommended as certain to produce a cure*, we may properly reason that very many cases are so intimately associated with a scrofulous condition of the system, or that morbid condition of the system amenable only to alterative treatment, that it at least will be found serviceable in mitigating the severity of the disease, with a hope that its uninterrupted use, for a length of time, may result, in very many cases, in permanent relief, as it has in the case of Mrs. Augustine.

A physician, writing us some time since, suggests its use as a prophylactic in certain cases, and remarks: “as cancerous affections, like scrofula, are mostly hereditary, and develop usually in persons of advanced age, and appearing in females usually after the cessation of the catamenia, it should be used by them early to destroy the germs of the disease which may exist in the system, better than to combat it after it has developed. As most females, at this period of life, are affected with some disease or another, why would it not be of great benefit, at this period, as an alternative to ward off their usual troubles?” Please try this. The suggestion of the doctor is good.

These cancerous cases are extremely difficult to treat, and care should be observed that the stomach retains kindly the remedy; therefore begin with half teaspoonful doses, diluted in a wine glass of water, given three times a day, an hour before each meal, and increase gradually to two teaspoonfuls three times a day, or more in some cases. In cases of open sores or ulcers, where there is great fetor, use Bromo-Chloralum, diluted one part to ten of water, to remove the odor and cleanse the parts; then apply the Solution Iodo, diluted one part to eight or ten of water, according to the sensitiveness of the parts. If the solution is not at hand, dilute the Elixir, about one part to four of water, and apply, taking care to use the Bromo-Chloralum to remove all offensive secretions, for to the extent that these are chemically changed into healthy secretions by the action of Bromo-Chloralum, according to Dr. Baker, do we relieve the system from the contamination of the circulating

fluids by its absorption. Particular attention should be given to the diet, which should be wholesome and nutritious, easily digestible, avoiding pork and indigestible meats. When it is necessary to use iron, as in an anæmic condition, and, at the same time, unite a sedative with it, use the Ferrated Wine of Wild Cherry, or you can give the Iodoform and Iron Pills, or Syrup Iodide of Iron, thus uniting the alterative with the tonic, and also use bitters and tonics as indicated. Particular attention should be especially directed to the secretions and evacuations. The bowels should be kept freely open with deobstruent laxatives or with alterative, saline aperients. These general suggestions I have always given as to treatment of cases, and in all cases with good results.

In regard to the case of Lupus, which I mentioned to you, of Mr. P., over 70 years of age, brother-in-law of Dr. Wright, of this place, I give you an extract from a note just received :

"January 18, '74. I am glad to say that the tumor upon father's face has disappeared. It is some twelve or fourteen years since it made its appearance, something like a wart, gradually increasing in size till it half covered the eyelid; closing the duct of the eye, which has now resumed its office, and extending on the nose quite down upon the cheek, scabbing over and coming off, leaving it porous or sponge-like underneath, and at times bleeding profusely. The tumor may, to all appearance, be pronounced cured."

Mr. P. used the Elixir internally, faithfully for two years, and applied also the same to the tumor, diluted one to five with water.

I enclose you copy of an article in the American Journal of Medical Sciences of Philadelphia, by Dr. Guptill of Elliot, Maine, giving successful treatment of a case of Exophthalmic Goitre, with the Iodo-Bromide of Calcium Comp.; and have, also, to-day, a letter concerning its giving relief in a case of enlarged liver, given up as incurable. I will give you these cases as reported to me, as they will be of service to you in the diversified cases sent to the Hospital.

Excuse the length of this; it is a fruitful subject.

Yours, truly,

NEW LEBANON, Jan. 27, '74.

H. A. TILDEN.

DR. O. S. PAINE,

Surgeon St. Elizabeth's Hospital, New York :

MY DEAR SIR:—

I mentioned in my letter a case of LUPUS.—Mr. PIERCE of Kinderhook, N. Y., brother-in-law of Dr. WRIGHT, of this place—and herewith give you a letter received from his daughter, concerning it:

Kinderhook, March, 18, 1874.

"Some fifteen years since a tumor made its appearance, something like a wart, upon the nose a little below the eye. It commenced scabbing over, the surface about it became inflamed, and nearly all who saw it expressed the opinion it was *Cancer*, and urged an operation before the eye became involved.

A friend, a physician occupying a prominent position in the profession in New York City, pronounced it "*Lupus*," and did not advise local treatment upon a patient as old as he, unless it encroached upon the eye.

Within the last four years it increased in size, extending half over the eye and down the nose quite on to the cheek.

It seemed to be of a spongy, porous nature, puffing out; and when the scab came off, as it did from time to time, it would bleed profusely. The discharge from it at times was considerable, of a thin watery character, and offensive, so that one would notice the odor on coming into the room.

Two years since at your suggestion, he commenced the use of the Elixir Iodo-Bromide of Calcium Compound and continued it as directed (a tea-spoonful three

times a day before meals, applying the Solution at same time,) for eighteen months when a change was perceptible; the discharge stopped, the inflammation subsided, it soon lessened in size, gradually dried up and in less than six months from that time a change for the better was noticeable. The last scab came off leaving a slight scar only. The duct of the eye which has been for a long time closed, has resumed its office. He now reads for hours altogether.

It is now some three months since the tumor disappeared and there is no indication of a recurrence of the trouble. He is now seventy-nine years of age, and in the enjoyment of almost unbroken health. The case is regarded as marvelous at his advanced age."

Mr. PIERCE was for many years a resident of this place and an esteemed friend of our family. I naturally felt much interest in the case, and urged him to persevere; as it would require time, in a person of his age; for the system to be brought gradually under its influence, and to respond. I did not deem it prudent to advise large doses, only such as would be retained readily by the stomach. I also advised applying the Solution, or Elixir diluted, externally. Mr. P. carried out these suggestions faithfully, for he had faith, notwithstanding for a year he could not observe any change for the better; but reasoned intelligently that it was an achievement, to hold it even stationary, with the chances of ultimate improvement; and so persevered until he was amply repaid by a decided change for the better, since which it has made a steady improvement to a cure. This case illustrates the necessity of perseverance, as well as that time is necessary to a complete renovation of the system in such cases. Too many expect a cure in a month, which is impossible.

New Lebanon, N. Y., March 30, 1874.

Yours Truly. H. A. TILDEN.

Goitre, Syphilitic and Scrofulous Taints, Glandular Enlargement, &c.

BY EDWARD A. TODD, M. D., CHICAGO, ILL.

Gentlemen.—My motive in writing you at this time, is more particularly to congratulate you upon the success (in my hands, at least,) of your Elixir Iodo-Bromide Calcium Comp. I have been in the habit of using it, more or less, ever since its introduction into the market, as an alternative in all skin diseases of obscure origin, or where a syphilitic or scrofulous taint was suspected; in glandular enlargements of similar origin; such as indolent, or non-suppurative bubo of the groin, enlargement of the prostate, etc.; and it has ever met my expectations and requirements. I have lately, however, had a case, where its use and success appear to me something of a novelty, and I will, therefore, give you a brief account of it. About one year ago (in the fall of '72) I was called to see a patient who was affected with commencing goitre. The patient was an otherwise healthy appearing female, of about thirty years of age, with no scrofulous or syphilitic history that could be ascertained. The enlargement was principally confined to the right lobe of the gland, and was about two-thirds as large as a hen's egg; the left lobe was, also, slightly enlarged. To be brief, after trying the usual remedies recommended in such cases, including the administration of the various preparations of iodine, blisters and leeches to the surface, etc., with no improvement, I commenced, about three month's ago, the use of the Elixir Iodo-Bromide Calcium Comp., and to-day the gland is of normal size and consistence. There was none of the disturbance of the digestive function, so constant and annoying, during the administration of the ordinary preparations of iodine.

Altogether the effects and results of the use of the remedy, in this single case, have been very pleasing and happy; and I hope to hear that it has proved as efficacious in the hands of others, in the treatment of similar cases.

iodo-bromide

CALCIUM,

COMPOUND.

ELIXIR IODO-BROMIDE OF CALCIUM, COMPOUND

(For Internal Use.)

Medically used in Scrofula Scrofulous Abscesses and Swellings, and all diseases of the blood traceable to a Scrofulous diathesis; in Cancer and Cancerous Tumors, Caries or diseased bone; Bronchial and Throat Affections, Pulmonary Degeneration, Erysipelas, Salt Rheum, Scald Head, and Cutaneous Affections; in Neuralgia Rheumatism, Piles and Deafness, and particularly efficient as an Anti-Bilious Remedy to combat what is commonly called "Liver Complaint."

PREPARED ONLY BY

Tilden & Co.,

New Lebanon, N. Y., and 176 William St., New York City.

ELIXIR IODO-BROMIDE OF CALCIUM COMPOUND.

Component Parts.—Bromine, Iodine, Chlorine, Calcium, Magnesium, Iron, Sodium and Potassium.

Medical Properties and Action.—Alterative, resolvent, tonic, anti-bilious, aperient and anti-scrofulous.

This new compound, since its introduction to the profession nearly three years since, has been used in so diversified a number of cases with such uniform success as to rank it among the most potent alterative and anti-scrofulous remedies in use. The many cases in practice which have been reported to us, where it has signally asserted its therapeutical properties, justify us in offering it to the Medical Profession as a remedy of superior potency, and one on which they can confidently rely to subdue, especially, that class of chronic cases of a scrofulous diathesis which the ordinary approved means so often fail to reach; and also in many instances successfully to combat those pathological conditions on which a very large number of cutaneous affections depends. Its action upon the lymphatic glandular system, causing the reduction or absorption of glandular and other tumors has well attested claims. We can confidently advise its exhibition in that type of disease which becomes amenable only to alterative measures. In our own experience it has proved a very happy agent to combat, in scrofulous subjects, *Piles, Facial Neuralgia, Catarrh, Caries, Necrosis and Abscesses*, where its exhibition was invariably attended with well marked *tonic* and *aperient* properties. We have no hesitation in pronouncing the combination of properties which it possesses as pre-eminently gratifying. A persistent use for months, though, will often be imperatively required. The following are among the many testimonials of its therapeutical efficacy, which have been forward-d us.

—O—
Cincinnati Lancet and Observer, June, 1873.

A NEW ALTERATIVE COMPOUND.

BY J. R. BLACK, M. D., NEWARK, OHIO.

The profession owes much to the Messrs. TILDEN, of New York, for introducing, for its convenience, fluid extracts of the various medicinal plants in common use.

Their *disinfectant*—*Bromo-Chloralum*—is the best and most unobjectionable of which I have knowledge. As a deodorant, its power is really marvelous. I have at this time a case of *cancer of the womb*, with an extremely offensive discharge, which the *Bromo-Chloralum*, properly diluted and used as an injection, corrects in a very effective manner. In the case, also, of a very old, bed-ridden lady, whose urine was discharged involuntarily, and which was of a very offensive ammoniacal smell—so that it was not possible to keep her bed free from its disgusting odor, until I directed the frequent use of this *deodorant*, and with the most satisfactory results.

But it is not this preparation to which I wish to direct attention, but another one for internal use, which these gentlemen have ingeniously prepared. I allude to their "*Iodo-Bromide of Calcium Compound*."

But, at the outset, allow me to say that what I have written, and wish to write, is not from any desire to puff either this house or any of its preparations. To do this I have no sort of motive, but, on the contrary, the heartiest dislike. But when a physician feels himself a debtor to any one, for putting a convenient and excellent remedy into his hands, it would certainly be playing the part of a professionally "prurient prude," not to feel himself free to make candid acknowledgment of the fact.

The **Component Parts** of this preparation are stated to be bromine, iodine, chlorine, calcium, magnesium, iron, sodium, and potassium. It is claimed, by a rival house, that the union is a chemical impossibility. But I do not know that the manufacturers claim that all these elements are chemically united, but only in solution. Almost the same union in a weaker and differently proportioned solution is not unfrequently met with in some mineral springs, as at Leamington, England, and in the Spa of Belgium. And this leads me to write what I have often thought, that as the curative virtues of some mineral springs are undoubted, why can not the same ingredients be concocted in a concentrated form for the convenience of the physician in the laboratory of nature? It seems that the Messrs. Tilden have done this in an admirable manner in this Compound of theirs—perhaps more strongly alterative than what nature usually generates. By putting a half a teaspoonful of the "Solution" (not the Elixir) in half a tumbler of water, a draught is at once prepared, which might deceive the *habitus* of some mineral springs. The taste is slightly sharp and acrid, but these impressions on the palate are gone in a moment after swallowing. The primary effect, especially when taken in the morning before breakfast, is precisely that of some mineral waters—a quick, pleasant, aperient effect. This I have noticed on myself scores of times, and have had it reported to me by almost every one to whom I directed its free administration.

The **Therapeutical Properties** of this compound have proved, in my hands, to be *alterative, laxative, resolvent*, and, in a minor degree, tonic. In the epidemic, which recently passed over the country, of influenza—popularly known as the epizootic—one of its most common sequelæ in strumous subjects was an enlargement of the cervical glands. This I found to disappear in the most satisfactory manner under the use of the "*Iodo-Bromide Calcium Compound*." In fact, it seems to have, as its composition would indicate, a special effect on the glandular structures of the neck. *Chronic irritation of the pharynx*, and recent enlargements of the tonsils, are also promptly benefited by its use.

In **Some Cutaneous Diseases** it is one of the most valuable of our preparations. A young lady, very fair to look upon, was exceedingly annoyed by a mild yet obstinate spot of herpes on her face. Mercurial ointments, oil of cade, and

other remedies of a like class, had failed to remove it. The "Solution" applied pure to the part affected, proved effectual, after only two or three applications.

In Prurigo, its beneficial action is no less apparent. This affection, as all know, is often very obstinate, and a not uncommon effect of eating freely of *Polygala Fagopyrum* cakes, swimming in Darwin's nectar. It is an annoying, disagreeable, and troublesome affliction. It is often as obstinate as lichen, which is so obstinate as to have received the name of seven-year itch—a disease which a fat old gentleman once assured me he had had seven years to a day.

For the Removal of Prurigo, twenty drops of the "Solution" well diluted and continued for two or three weeks, will cure in almost every case. Such at least has been my experience. Excepting for children and adults of very fastidious taste, I prefer the "Solution" to the "Elixir." It is more active, and when properly diluted, more readily absorbed than the "Elixir." Considering that when it is deemed desirable to administer an alternative other than the mercurials, we are almost limited to the Iodide of Potassium, this preparation should be welcomed as a valuable addition to the list. *It seems to be free* from some of the objections appertaining to the Iodide; such as the occasional production of severe irritation of the Schneiderian membrane, frequent irritation of the stomach, and more or less of a general debilitating effect. *It is a common expression* of those who have taken the compound under consideration, and for appropriate disorders, *that they feel better and more buoyant*, without having experienced in the least any unpleasant effect, and this is more than can be said of the great majority of our remedies.

Use of Iodo-Bromide Calcium Compound, in Catarrh.

In a very able and instructive essay recently published by Walter M. Fleming, M. D., on Catarrh, and its relation to throat and lung diseases, the Iodo-Bromide of Calcium Comp., receives a most prominent position among the remedies to be applied for its relief. Quite recently, Dr. Fleming writes; "There has been place before the public a chemical preparation issued by TILDEN & Co., Chemists, New Lebanon, N. Y., that has proved itself of great value in this disease; the crude preparation is the Solution Iodo-Bromide Calcium Compound, the component parts of which are Iodine, Bromine, Chlorine, Calcium, Magnesium, Ferrum, Potassium and Sodium.

This compound possesses the desirable qualities of alterative, disinfectant, stimulant, tonic, and resolvent, all of which are eminently qualified to prove serviceable, in the very disease in question.

In its crude state, this preparation is irritant, and almost a caustic, consequently it requires large dilution before applying to the delicate membranes of the nose, but when properly prepared, as is best indicated by the case for which it is required, it has already proved itself to be a most valuable addition to the list of reliable remedies. There is also an Elixir of the Iodo-Bromide of Calcium Comp., prepared by the same firm, expressly for internal use, consisting of the same component parts, and identical medical qualities.

This preparation possesses all the desired advantages requisite, as a prompt and efficient alterative, tonic, and anti scrofulous remedy, particularly indicated in ulcerated and diseased membranes, caries of bones etc., (as may be readily conceived by reference to its component parts). This agent is found to be eminently qualified to benefit this type of disease, and is doubtless one of the most reliable internal and constitutional remedies.

These two preparations above, both for local and internal use, can hardly be surpassed, for the successful treatment of Catarrh."

In Scrofulous Abscesses, Caries, Tumors, Neuralgia, &c.

Was called August 10, 1869, to P. V., æt. 12, Irish, of a scrofulous diathesis. He had been under medical treatment for several months without appreciable relief. At the request of the attending physician I was summoned to take charge of the case. I learned that the boy was first attacked with pain and swelling in the hip, simulating acute rheumatism, which subsequently terminated in a large abscess, which required opening. Suffering intense, necessitating the constant employment of morphine in large doses for several weeks, the pain continued in violence, until abscess after abscess appeared, one on hip, one in groin, two on leg below the knee and one above—in all five. The draught upon the vitality of the system was so profuse and debilitating, that in a very short time the patient had not strength sufficient to enable him to rise from the bed. The appetite became poor, the secretions scanty, which together with the insomnia and general cachexia, apparently foreshadowed speedy dissolution. My treatment was confined to alteratives, such as Iodine, Iodoform, Iodide of Potassium, Carbolic Acid, (as a topic and internally) Arsenical preparations and the Phosphates—to tonics such as Elixir of Iron, Quinia and Strychnia, Chemical Food and Ferrated Wine of Wild Cherry, and of this class of remedies, the "Ferrated Wine of Wild Cherry," manufactured by TILDEN & Co., was the only agent which appeared to affect the system. This restored the appetite and thus far measurably benefited my patient—though further than that the disease remained unchecked and my treatment abortive. The suppuration continued profuse and portions of dead bone were from day to day extracted. Several physicians of large experience saw the patient with me, though they suggested no alteration of the plan of treatment.

At this stage of the disease, I read in the *Journal of Materia Medica* a notice of a new remedy, the "Elixir of Iodo-Bromide of Calcium Comp." highly commended for its alterative properties and especially its power in combating scrofulous cachexia, &c. I wrote to Messrs. TILDEN & Co., for and received a bottle by express. I directed my patient to take one teaspoonful three times a day—the medicine being rather agreeable he expressed a preference for it, rather than the remedies he had been using. Upon visiting the boy after a few days, I was surprised at the marked improvement observed in the appetite and general indications of the case. I advised him to continue its use, gradually increasing the dose. In one week's time the mother calling at my office remarked, "my boy is better." During the day I saw the boy, and found the discharge was less profuse and had a more healthy appearance. Improvement continued *uninterrupted*; *no more dead bone* was observed after patient had *been finally placed under the influence of this new medicine*. In one month's time the boy was able to walk a half-mile from home. He is now nearly well. Since patient commenced taking "The Elixir of Iodo-Bromide of Calcium Compound," I have given him no other medicines only as was necessary to correct the disturbed condition of the secretions; consequently the combatment of the disease must be attributable to the influence of the "Iodo-Bromide."

I have since used this new agent in a large number of cutaneous diseases and am highly gratified with its effect. I consider it a *valuable acquisition* to our therapeutical agents and could not think of being without it. L. ROGERS, M. D.

Scrofulous Abscesses, Impoverished Blood, Rheumatism Liver Complaint.

J. B. Nobel, M. D., BOONEVILLE, N. Y.—I am using your Elixir Iodo-Bromide of Calcium Comp., with marked success, in a case of enlarged knee joint, and scrofulous

abscess of the left hand, also, in another case of impoverished blood, with rheumatism and liver complaint. I have used it successfully, also, in two cases of erysipelas acute with diphtheria. I was sent for to attend a patient, suffering with a large scrofulous abscess thoracic and of the right hand. A skillful physician had treated the case for four months, but with very little benefit as all proper remedies had been given the patient. I at once gave your "Elixir Iodo," and applied the solution externally for some days. The case is so far doing well, and I am confident of a full cure in a short time. I think it a better alternative than all others.

In Scrofulous Swellings and Ulceration.—W. B. ANSLEY, M. D., Apollo, Pa., writes:—"In regard to the Iodo-Bromide of Calcium Compound, I will say, it seems to be *all* that we could desire. I will only give the outlines of *one* case out of several of a similar kind that I have treated with this remedy.

Robert J—, aged 26,—English,—came to me for treatment, Sept. 15, with scrofulous swelling and ulceration of the cervical, lymphatic glands, of 18 months' standing. Two of these glands were discharging freely characteristic scrofulous pus, and some four others were much swollen, two of them seemingly just ready to break down, which they afterwards did. His history showed the disease to be hereditary. His general health was completely broken down, so that he could not follow his usual occupation, that of a sheet roller. He was placed on the following medicine:

B. Elix. Iodo-Brom. Cal. Comp., (Tilden's.)

Fluid Ext. Sarsap.,—aa., $\frac{3}{4}$ iii.

Sig.—Dessert spoonful 8 times daily.

To the glands he applied ointment of Iodide of Cadmium. He was also directed to take as much out-door exercise as possible, and live on a nutritious diet, avoiding alcoholic stimulants. The first ten days he did not show any signs of improvement, but from that time on he has improved steadily, continuing the use of the medicine, as originally prescribed, with but few intermissions. He may now be considered cured,—the ulceration having healed and the enlargement entirely gone. He has resumed work, but will continue using the medicine as a precautionary measure. In closing I may add that he had been treated during the entire 18 months before coming to me by some able physicians."

In a Case of Scrofulous Abscess.—Dr. M. F. Harvey, (Ontario, Canada) writes. "The Elixir Iodo-Bromide Calcium Compound is a magnificent remedy. I am using it with marked success in a case of Scrofulous Abscess in the upper part of the femur.

I think more of this remedy than all the many alternatives I have noticed in medical journals for the last two years."

In Old Affections of Joints and Bones.—

Gentlemen,—I take pleasure in being able to report the following case, showing the great value of the Iodo-Bromide of Calcium Compound, in old affections of the joints and bones. I was called some two years and a half since to attend a returned soldier, thirty years of age, his left leg was enormously swollen and painful, especially about the ankle. He was greatly emaciated and anæmic, had sympathetic or hectic fever. He was very low indeed and not expected to live by any one who saw him. He had been under the care of many physicians, the limb had been injured on board a transport ship by the fall upon it of a heavy box—I examined the ankle carefully and concluded to pass an exploring needle, and at

once detected pus in several localities. Incisions were then made and free exit afforded to the retained ill-conditioned fluids ; upon searching with a probe the tibia was found roughened and diseased in several sites—tonics and restoratives were given of Bark, Iron, Arsenic, &c. The success was not satisfactory—The patient gradually failed, his appetite gave way, diarrhoea set in, a cachectic state ruled the case, the man was utterly exhausted and there seemed to be no chance of his recovery. At this time I was induced to make a trial of the Elixir Iodo-Bromide of Calcium Comp., a teaspoonful was given properly diluted three times a day. The Solution was also locally applied diluted with alcohol and water, four parts. The result was very gratifying, my patient at once began to rally under the tonic and alterative influences of the remedy—His appetite returned, also his color and flesh, the discharges lessened, the swelling abated and the pain and condition of the joint and bones improved—soon dead pieces of bone ceased to come away, and in two months he rode ten miles to see me ; from that time he made a rapid recovery.

He is now a stout, fleshy, strong man, and owes his life to the use of the Iodo-Bromide of Calcium Compound. The joint is still somewhat impaired as to its free action, but the man walks very well and attends to the labors of the farm, and requires no further professional attention.

I have only to say that I have great confidence in this remedy and shall continue to recommend it and use it in ill-conditioned affections of the bones and joints whether the results of accidents alone, or as connected with scrofulous or other cachectic states of the system. THEO. H. JEWETT, M. D., South Berwick, Me.

Psoriasis and Scrofula.—Dr. HEBERT, Brooklyn. I have used your Elixir Iodo-Bromide Calcium Comp., in quite a number of cases of Psoriasis and Scrofula with marked success, and I am recommending it to my medical acquaintances.

Scrofulous Induration of the Nose.—By X. T. Bates, New Lebanon, N. Y.—Was called in February, 1872, to visit Mrs R., found her suffering from a troublesome tumor in the right naris, of some twelve months standing, so large as to disfigure the face, accompanied with intolerable burning and itching sensations, it had obstinately resisted every method of medication to which she had been subjected, which I learned comprised both discutient topics and alteratives, and anti-scrofulous remedies. I suggested the use of several lotions and internal medicines, no one of which she appeared inclined to favor, remarking "It is almost needless for me to use that which has already been proven worthless in my case by faithful trial ; give me a new prescription."

I then advised :

B Elixir Iodo-Bromide Calcium Comp., - - - Oj.

Take a teaspoonful one hour before each meal, after one week, increase the dose to two teaspoonfuls.

This was sufficient to effect a cure, which I pronounce a permanent one, inasmuch as there has been no return of her difficulty since its disappearance, nearly a year since.

I have no hesitation in pronouncing the Elixir Iodo-Bromide of Calcium Comp., the most efficient and satisfactory anti-scrofulous preparation I have ever used, but the sphere of its usefulness is by no means confined to scrofula. Aside from this special usefulness it has an application as diversified as the term *alteratives* can make it.

In Chronic Affections, Incipient Lung Diseases, and Cancer of the Stomach.—I have used the Elixir Iodo-Bromide of Calcium Compound, with very marked success in many cases, and regard it as one of the best tonics and alteratives, in all scrofulous diseases, I have ever met with.

I have used it with much benefit in cancer of the stomach, and other local diseases of a kindred nature with excellent results. I have also used it in many cases of incipient lung disease with marked success. In cases of chronic ulcers, I employ it internally, using the Bromo-Chloralum externally, applying it two or three times a day to the ulcerated surfaces, and uniformly with the best results; the improvement in all the cases has been rapid, and at this time bids fair to be permanent.

I regard it as a valuable remedy, one worthy of the attention of the medical profession. I think I was the first to use it in this part of the State, and have done so quite extensively, and feel sure, if judiciously prescribed in cases adapted to its use, it will seldom fail to accomplish all that is claimed for it.

A. J. FULLER, M. D., BATH, ME.

Chronic Articular Rheumatism.—Dr. W. J. Gilbert, Fremont, N. C. Your Elixir Iodo-Bromide Calcium has worked wonders in the relief of Mrs. C., who for the last four years has suffered from Chronic Articular Rheumatism of every joint in the body, rendering her perfectly helpless. To day with Solution of Iodo as a wash, and the Elixir internally, the hinges of the lower jaw have been unlocked, the elbow to flex, the joints of the lower extremities unshackled, which heretofore had resisted every medicine taken. I look upon the Elixir Iodo and Bromo-Chloralum as invaluable medicinal agents in the hands of the Profession.

Piles and Scrofula.—Dr. ALLEN, Pella, Iowa, I have used your Elixir Iodo-Bromide Calcium with great success in the cure of Piles and Scrofula.

In Chronic Irritable Ulcers.—Dr. S. H. POTTER, of Hamilton, Ohio, says: Allow me to express my sincere gratitude for your offer to send me a quantity of the Elixir Iodo-Bromide of Calcium Compound. It has proven itself in every case a very valuable and potent remedy. I have been using it on a Chronic Irritable Ulcer on my own person arising from a severe contusion five years since.

Singular as it seems nothing else promotes healthy granulations, nothing else can be tolerated, and yet this acts like a charm.

Both internally and externally I have found it more efficacious than any other medicine that an experience of forty years of devoted practice enables me to select.

BALTIMORE, Md., Aug. 1st., 1872.

In Bilious Disorder.—Gentlemen,—It affords me pleasure to say that I have derived the most beneficial effects from the use of the Elixir of Iodo-Bromide Calcium Compound. I had been suffering with biliary disorder for a long time, and recently was salivated to such an excessive degree as to produce general derangement and great physical prostration.

The taking of but two ounces of the above mixture has produced a normal action of the liver and restored me to a healthy condition.

Yours with respect, A. D. GREENTREE, 378 Franklin St.

In Cerebro-Spinal Meningitis.—I take pleasure in reporting two cases of *cerebro-spinal meningitis*, occurring in my practice, in which I found your new preparation, the Elixir of Iodo-Bromide Calcium Comp., of great service.

The first was that of a boy aged 9 years, who was first taken with severe lancinating pains in the Cranium—extending down the back and to the limbs—followed by delirium—attended with the usual symptoms—pupils of eye alternately dilating and contracting—restlessness—pulse about 120—articulation very difficult. I gave him Quinine and Dover's Powder freely, alternated with the Iodo-Bromide and followed up this treatment for several days—using Leptandrin occasionally to regulate the bowels, when the worst symptoms were greatly relieved. He could not however use his limbs—I persevered in the use of the Elixir for several weeks and finally had the satisfaction of witnessing my patient's restoration to health.

In the other case which was of the same general character, I administered the Elixir more freely in the first instance, using less of the Quinine and Dover's Powder. All the symptoms subsided within three or four days. I am inclined to the opinion that the Iodo-Bromide of Calcium Comp., in conjunction with Quinine and Dover's Powder will cure all such cases, and I take great pleasure in bringing those above cited to the notice of the profession through the columns of your valuable Journal. Very Truly Yours, E. TEFFT, M. D., TOPEKA, KANSAS.

Cerebro-Spinal Meningitis.—By L. GILE, M. D., 4 Corners, N. Y. Having recently had my attention called to the Elix. Iodo-Bromide of Calcium Comp., particularly for its alterative and anti-scorfulous properties, I advised its use in several subjects suffering from Psoriasis, which came under my treatment during the past winter. Its medicinal virtues were so manifest as to substantiate all that is claimed for it regarding its efficacy in cutaneous affections, and having more recently noticed in a pamphlet issued by the manufacturers, a letter from Dr. Tefft, concerning its remarkable adaptation to "Cerebro-Spinal Meningitis," I was readily led to make a thorough trial of it in several cases of the latter affection. Its use was attended with such gratifying results that I am constrained to regard it of sufficient importance to give in brief my experience, believing when properly used, it will prove an invaluable adjuvant in the control of this dreaded and painful malady.

Case 1.—J. M., male, aged 14. Suddenly stricken down, vomiting and diarrhoea, lancinating pains in head and spine, tenderness, intolerance of light and sound, well marked tonic contraction of the muscles of the neck, pupils somewhat dilated, tongue dry and dark, pulse 120, and insomnia. Such was his condition when I first saw him. I at once put him upon the use of Quinine, Gelsemium and Veratrum combined, sinapism to spine. The following day there being no perceptible change, I prescribed:

R Elixir Iodo-Bromide Calcium Comp., - - ʒiv.

Take one teaspoonful every four hours

R Chloroform,

Sweet Oil, - - - - - aa ʒiii.

Apply freely to entire spine on a piece of woollen cloth, and repeat as frequently as patient can comfortably bear.

Improvement was manifest within twenty-four hours, tongue moist, pain less, and more rest, convalescence uninterrupted.

Case 2.—L. M., aged 9, sister of J. M., train of symptoms almost identical, treatment the same with the exception that the Iodo was administered upon my first visit to patient, and the chloroform liniment freely applied. Result—symptoms markedly less severe, and recovery was rapid.

Case 3.—Mrs. D., aged 60, was similarly attacked, though symptoms from the first more alarming—Semi consciousness and hippocratic countenance. The general indications appeared to foreshadow dissolution. Treatment the same. Result, improvement perceptible within 48 hours, though the recovery was somewhat less rapid than in preceding cases. In each of the above cases I continued the use of Quinia in large doses, and Veratrum and Gelsemium combined, as pulse seemed to demand.

I have no hesitation in pronouncing the Elixir Iodo-Bromide Calcium Comp., an invaluable adjuvant in the treatment of Cerebro Spinal Meningitis, and am confident that this statement will be corroborated by the experience of all physicians who may use it under similar circumstances.

Deafness Caused by Cerebro-Spinal Meningitis.—Dr. J. A. Ingles, Monroe, Ill. I used the Elixir Iodo-Bromide of Calcium in a case of deafness, caused by Cerebro-Spinal-Meningitis with excellent success. The case is improving rapidly, patient is about ten years old, gave half a teaspoonful in water three times a day.

In Rheumatism and Piles.—Communicated by X. T. BATES, M. D.

Was called January 6, 1872, to attend M. C., aged 50 years, of a scrofula-rheumatic diathesis. He had been under treatment for rheumatism for nearly two years, by several physicians of eminence, who agreed as to the basic disease, but differed materially as to the complication. One diagnosed a cancer of the stomach, another scirrhus affection of the liver, another suspected malignant disease of the rectum, all overlooking the real dominant morbid action. During this time he had been confined to the bed, and gradually on the decline, until he finally lapsed into a condition in which he was barely able, unaided, to raise himself in bed. Appetite poor, countenance cachectic, occasional vomiting, foul breath, foetid odor in room, bowels confined, renal secretions scanty, much rheumatic heat in the bowels, and a distressing cough, which particularly set in at night, sometimes quite banishing sleep, while the mental depression quite equaled the physical prostration. He was also suffering from the bloody piles, and at the time of my first seeing him he remarked to me that he thought the piles were the one pre-eminent cause of his prostration. The odor of the room was very offensive and sickening, and to its malarial and nauseative influence I could but attribute one cause at least of his physical exhaustion and cachexia. Here the Bromo-Chloralum was called into requisition, and proved itself signally efficient in completely removing the odor and purifying the air. Hope entirely had deserted him of getting relief from the rheumatic fever, pain and stiffness of joints, and he solicited only a cure for the piles, and the cough. Such then was the patient's condition when he came under my treatment, and I must confess, that in consideration of the chronic character of his complaints and ability of his medical advisers, that I had little hope of benefitting him. But having read in the "Journal of Materia Medica" the gratifying experiences of the Profession with the Elixir Iodo-Bromide of Calcium Compound, in both rheumatic and scrofulous affections, and having myself used this "Compound" with marked success in many conditions when I thought only an *alterative* was required, I thought here also to try its power. I consequently prescribed :

R. Elixir Iodo-Brom. Cal. Comp.,..... ¾ viii.

Take one teaspoonful 3 times a day for 3 or 4 days, after which duplicate the dose; and for his distressing cough I prescribed:

R. Syrup Tolu, Syrup Wild Cherry,..... aa ¾ ii.

Take one teaspoonful "pro re nata." In one week's time the cough was better, but in other respects his condition was unchanged. Nevertheless I continued the above treatment, and in about a month thereafter my patient began to experience considerable relief from the piles, and the system generally to recuperate. He has continued to improve, and now both the cough and the piles have succumbed, the rheumatic fever is less severe, the cachexia passing off, and his general strength greatly improved.

Even though the "Iodo" may not be successful in dislodging and eradicating the rheumatism, in that it has but restored strength, and cured the piles, it has proved itself a powerful and useful remedy, and a valuable acquisition to the "Materia Medica." I have found the Elixir Iodo-Bromide Calcium Compound by far the most *satisfactory alternative* I ever used.

Rheumatic Gout.—Letter from Dr. B. C. Powell.—It gives me pleasure to state that after a fair trial of your new preparations "Brome-Chloralum"—and Iodo-Bromide of Calcium Compound"—Elixir and Solution, I have found them fully deserving all the encomium that has been so fully accorded to them. I have not the time at present, but will reserve for another occasion minute reports, of special cases—but desire simply to mention one instance of the successful use of the latter, in the treatment of Rheumatic Gout. An elderly German gentleman of this city, sought my advice while suffering from a severe attack of this painful and troublesome complaint. His feet, hands and arms, were very much swollen and puffy,—he was totally unable to use them. I prescribed the Elixir internally, at the same time directed the Solution properly diluted, to be used as a topical application. The symptoms gradually abated, and before the expiration of two months, he was restored to his usual good health. Its effect in this case has fully satisfied me of its claim to be classed among the most efficient anti-rheumatic remedies.

Measles.—S. R. NISLEY, Pemberton, Ohio, May 19th, '78. I have used the Iodo in all my measle cases, and more especially at that stage of the disease, when there were evidences of general Anasarca, or in other words a bloated condition of the countenance with a painful swelling of the glands of the throat and neck. I can not speak too highly of the diuretic properties of the Compound. I prefer it to any of the ordinary diuretics so generally prescribed in our days.

It will recommend itself, and I think I can prescribe it every day for my patients with the hope of good and favorable results. Accept my thanks for your favor, with the assurance that I am determined to test the Compound to its fullest extent.

DUNKIRK, N. Y., Dec. 29th, 1872.

Extract from Letter of Dr. P. A. Molling.—"I have used lately one-half dozen bottles of your most excellent Elixir Iodo-Bromide of Calcium Comp. in chronic sore legs, and must confess, with an almost unequalled success in every case. I could send to you several pleasing testimonials."

OFFICE OF JAPANESE EMBASSY, Washington, D. C. June 25, 1872.

Letter from the Surgeon of the Japanese Embassy.—Dear Sir—I have much pleasure in stating that I have made a careful trial of the preparation which you forwarded to me known as the Elixir of Iodo-Bromide of Calcium Comp. I have found it singularly efficacious in the treatment of secondary Syphilis, a number of severe cases having been lately under my personal observation.

One case in particular attracted my attention not only from the length of time the patient had been suffering from the symptoms which were very severe, but also from the fact that a long course of the treatment usually adopted in such cases had utterly failed to make an impression upon the symptoms or to avert the progress of this formidable disease.

• Two months ago I commenced using the Elixir Iodo-Bromide in this case. The patient, who is a young man of twenty-eight, then presented the following appearance.—A large number of obstinate copper colored eruptions were visible on the skin, over the face, arms, chest and limbs, and his muscular system was much emaciated, being also troubled with an obstinate cough and the expectoration of blood. The mucous membrane of the throat and tongue was covered with greyish ulcerations which had the effect of rendering the voice husky and indistinct; besides this the patient complained of loss of appetite and inability to sleep from severe darting pains in the joints and limbs. He had contracted an indurated chancre about five years previously which healed in about three months—had been suffering from secondary symptoms nearly four years and was very much depressed in spirits—afraid he could not get well &c.

I thought this a good case for the trial of the Elixir and commenced giving it in teaspoonful doses 3 times daily, one hour *after meals*. As this dose did not disorder the stomach and appeared to increase the appetite, at the expiration of ten days I gave him two teaspoonfuls 3 times daily in a little water, and have continued it steadily ever since with the following results:—At the end of the first fortnight the patient was much improved in spirits, with increase of appetite and greater vigor in the digestive organs. There was likewise a marked diminution of the nocturnal pains, with diminished cough and expectoration.

At the end of the first month, the cough had entirely disappeared and the patient had excellent appetite, while the ulcers in the throat were showing a disposition to heal. At the present time nearly two months have elapsed since the first exhibition of the Elixir, and the patient himself says he is nearly well.

He has improved greatly in health and strength—the spots on the surface have almost entirely disappeared, and the ulcerated state of the mouth and throat has improved in a most remarkable manner.

These excellent results I must attribute entirely to the Elixir Iodo Bromide Calcium Compound and I consider it the best medicine I have ever used in cases of this kind.

I remain, Dear Sir, Yours Truly, ROBERT. J. SLOAN, M. D.

Surgeon to Japanese Embassy, late Surgeon U. S. Army.

Use of Elixir Iodo-Bromide of Calcium Comp., in Deafness, resulting from Scarlet Fever.—By X. T. BATES. M.D.—During an epidemic of Scarlet Fever in B——, Vermont, Mrs. W., was attacked by this malady and in the convalescent state discovered that her hearing had become somewhat impaired.

This impairment gradually increased until fears were entertained both by herself and friends that she would ultimately lose her hearing entirely. At the suggestion of her husband whom I had previously treated for a similar disorder, she was induced to try the following prescription:—

R Elix. Iodo-Bromide Calcium Comp., - - - - - Oss.

Sig.—One teaspoonful in half a wine-glassful of water, one hour before each meal.

Improvement soon manifested itself, and in a few weeks a thorough cure was effected.

Within a month I have had the pleasure of seeing this patient and was informed by her that she alone of several who were similarly affected had escaped permanent deafness—a result to be attributed entirely to the use of the Elixir.

NEWARK, Ohio, June 10, '78.

Scrofula.—Extract from letter of Y. CURTIS PRIEST, M. D., "I have a very unfavorable case of Scrofula which seems to be making rapid improvement under your Elixir Iodo-Bromide Calcium Comp. Indeed the parents of the child think it is working wonders."

G. A. WILLIAMS, M. D., Kampsville, Calhoun Co., Ill., June 7, 1878 "Your Elixir Iodo Bromide Calcium Comp., is superior to any Alternative I have ever used, and I would not be without it under any consideration."

Scrofula and Necrosis.—Letter from GEO. W. PARR, M. D., Perrysville, Ashland Co., Ohio, May 24, 1878. "I get better results from your Iodo-Bromide of Calcium Compound in Scrofula and Necrosis, than from any other known remedy or combination of remedies."

Scrofulous Affections of the Face.—A. M. HEISTAND, M. D. "I treated successfully a very obstinate case of Scrofulous Affection of the face, with Necrosis of the superior maxillary bone, with the 'Iodo-Bromide Calcium Comp.' internally and externally. I have been using the 'Iodo' for six months, with great success.

Chronic Arthritis.—Letter from A. T. STEELE, M. D.,—"I have used the Elixir of Iodo-Bromide of Calcium Comp. in an old standing case of chronic arthritis, (inflammatory gout) and find that it does more good than all the remedies combined."

Inflammatory Rheumatism.—PAUL F. DANCH, M. D., Bonaghstown, Adam Co., Pa., May 19, 1878. "I am well pleased with the action of your 'Iodo-Bromide of Calcium Comp.' having used both preparations in an inveterate case of sore leg. I have now another similar case on hand, and I feel confident of a successful issue. The case is Inflammatory Rheumatism, complicated with Scrofula, no doubt; but I have great faith in your preparations."

Inveterate Psoriasis.—DANIEL E. WELLS, M. D., Bristol, N. H. "I am using your 'Elixir and Solution of Iodo-Bromide Calcium Comp.' with very favorable effects. I have one case of Inveterate Psoriasis of 18 years standing, which is being cured by their use. The patient's skin instead of being completely covered with scales has become as smooth as in his childhood.

Elixir Iodo-Bromide of Calcium Compound in Deafness.—By X.

T. BATES, M. D. Accident first called my attention to the utility of this Compound in deafness, a little more than a year since, when I was called upon to visit a young man, a merchant, of sedentary life, who had recently returned from the West in so debilitated a state that it necessitated his entire relinquishment of business. It appears early in January, he contracted a severe cold, which seemed to exhaust its energy in the head, setting up acute otitis which terminated in intensifying to a high degree the partial deafness to which he had been a victim for half a score of years, and in addition accompanying it with intolerable *tinnitus aurium*, and subsequently there was loss of appetite with much languor and debility in which every organ seemed to participate. He sought and obtained the best medical advice and was under treatment three months, during which time both the deafness and atony were manifestly growing on him. Countenance becoming cachectic, appetite, strength and ambition constantly on the decline were grave indications which appeared rather to foreshadow early dissolution. His medical attendants finally urged both a change of clime and employment.

Such were his physical condition and promises when he came to me for advice. Bearing in mind the several valuable elementary constituents of the "Elixir Iodo" and my former happy experience with this medicine in scrofulous subjects to combat *Piles*, *Neuralgia*, "*Sympathetic Catarrh*," *Caries*, *Necrosis*, and scrofulous abscesses, when I had employed it with very uniform success, I thought here to try its efficacy as an appetizer and general alterative, with little or no expectation of removing the cause of deafness which I diagnosed Scrofulous induration of the Tympanum. My prescription was:

R Elixir Iodo Bromide Cal. Comp. Oj.

Take one teaspoonful in a half wine-glass of water three times a day, one hour before meals—after a week's time increase the dose to two teaspoonfuls.

I soon lost sight of the young man, and heard no more of him till after a period of four months when I received a letter from him wherein he requested a renewal of the prescription I had previously given him, stating that it had been the means of affording him great relief, that while under my treatment, both his appetite and strength rapidly improved, spirits revived, and deafness appeared rather to succumb, and his general health so immeasurably improved, that he at length was enabled to resume business relations. But no sooner did his medicine become exhausted than his old symptoms recurred. He then consulted his family physician, who made several applications of Nitrate of Silver to the ear, and also subjected him to constitutional treatment, which was persevered in for a space of three weeks without any perceptible benefit.

I immediately forwarded a duplicate prescription with the request that he should inform me from time to time of his condition. But I heard nothing direct from him until January of the present year, when I received the happy intelligence that he was enjoying a degree of health to which he had been a stranger for years. He had barely used the medicine two days ere he began to experience relief, and within an interim of three weeks, his hearing was restored almost completely. His own words are:—"I could hear better than any time within the past ten years."

My experience with the elixir in deafness has not been confined to the above recorded case, but I have prescribed it in four other cases, in only one of which did it disappoint me, and here the patient neglected to use it the length of time required in a fair trial. In the majority of subjects even when it is potent to disarm and conquer the morbid processes which go to form diseased structure, I

regard a persistent use necessary, until from *two* to *three* pints of the "Comp." have been introduced into the system. I shall contribute my further experience with it in similar cases.

Fistula Sacci Lacrymalis.—G. H. Harcy, M. D., of Bellevue, Ohio, writes: With regard to your Elixir, and Solution of Iodo-Bromide of Calcium Comp., I can say they are most valuable remedies. Last winter a farmer friend of mine, who lives just out of town, came to my office saying he had a very sore eye; he had been to a number of physicians, but they had all refused to undertake to cure it. I advised him to go to Cleveland and have an operation performed, he disliked very much to go and urged me to take it in hand. He removed the cloth from his eye, and I found the case was a far advanced *Fistula Sacci Lacrymalis*. My friend used to weigh 165 pounds, he now weighs 112, being subject to *Dyscrasia Scrophulosa*. I put him under the use of your "Elixir Iodo" internally as a general tonicum and stomachicum, externally I used your "Solution of Iodo-Bromide of calcium in the manner in which it is recommended. In about six weeks his *Fistula* got well, and the tone of his system was improved.

Extract from Letter of Dr. C. S. Lacey.—"I wish to say one word in regard to two of your preparations, the Elixir Iodo-Bromide of Calcium Comp. and Bromo-Chloralum. I have used them in conjunction in treatment of chronic ulcers—giving the former internally, and using the latter externally—with very satisfactory results indeed. I have administered the Elixir Iodo-Bromide Calcium, Comp., in Salt Rheum and other skin diseases with marked success.

Extract from Letter of J. B. Nobel, M. D.—"I have used the Elixir Iodo-Bromide of Calcium Comp., with excellent results in cases of cachexia—also in a case of Liver Complaint, complicated with Rheumatism, when there was, moreover, a scrofulous tendency. I have prescribed it in Bronchial and throat affections with very gratifying success—and generally in all cachectic cases."

Scrofulous Ulcerations.—RICHARD D. LEE, Physician of Alms-house, Harford Co., Md. "I have now under treatment, and almost cured the worst case of scrofulous ulceration I have ever met with. My treatment has consisted, in the use of the "Elixir" Iodo-Bromide Calcium Comp." internally, and the "Solution" of the same as a wash.

Letter from Dr. JOHN H. HAYNES, Brainard's, N. Y.

Gentlemen—"I am trying your Elx. Iodo-Bromide Calcium Comp., on an old lady who had been treated by at least a half score of physicians, without any benefit, but says that the "Iodo" is doing her good.

Letter from Jno J. HAWKINS M. D., Glasgow Mo.

At the suggestion of B. F. Powell, M. D., I was induced some time ago, to try your preparations of "Iodo-Bromide Calcium Comp." "Elixir" and "Solution" also "Bromo-Chloralum," and with very satisfactory results. They are getting to be almost indispensable; think you deserve great credit and commendation.

Bromo-Chloralum.

RECENT CORRESPONDENCE.

Letter from Dr. J. N. Wilson, Sumner, Iowa; "I have given the Bromo-Chloralum a fair trial as a deodorizer and disinfectant, and found it worthy of all the praise that is given it. I tried it in a cellar where a foul smell existed and in a short time the air was just as pure and fresh as above. I have used it also with good results on cancer and sore-throat.

Bromo-Chloralum in Chronic Diarrhoea and Ulceration of the Bowels.—Letter from M. V. B. Saunder Jackson, Mich.—Having had a very severe case of Chronic Diarrhoea, and Ulceration of the Bowels, under my care for several months, and not being able with all the usual remedies to afford only temporary relief, I resorted to injections of Bromo-Chloralum $\frac{3}{4}$ i, warm water $\frac{1}{2}$ p, immediate relief followed the first application; the patient had had ten or eleven passages during the night, and was very much reduced; but after using the above, there were no passages until the following morning, only three injections were given and those, two and three days apart: and three weeks from the first, the patient reports a perfect recovery. This was the only treatment used.

Letter from S. P. Hoyt, Elk Creek, Va.—One case with your disinfectant "Bromo-Chloralum" was somewhat remarkable. The corpse of Mrs. H., aged about 80 years, who had died in Kentucky, was brought in a metallic casket to this place for burial. Her friends desiring to view her face, had the coffin opened; the odor was so bad it was almost impossible to stay in the room. I was requested to use the "Bromo-Chloralum," and in fifteen minutes there was not a particle of smell in the room nor any unpleasant odor from the corpse while it remained in the house, which was 36 hours before burial. It certainly exceeds anything of the kind I have ever known.

Monticello, Jones Co., Iowa, May 30, 1873.

Dr. N. M. Smith & Son;—Gentlemen.—Please allow me to express my sincere thanks for your timely suggestion of using the "Bromo-Chloralum," manufactured by TILDEN & Co., N. Y., I used it according to directions as found on bottle, and found it perfect in rectifying the effluvia arising from a corpse, with which I watched last April. I have since recommended it to be used by a family in Delaware County, where the gentleman was being eaten up by a cancer. In both cases the rooms were so overcharged with stench, that it was impossible for the attendants to remain with them. I have attended both of the funerals of these persons, and there was not the least unpleasant odor arising in either case.

As the "Bromo-Chloralum" sends forth no odor of itself, it proves to be the most perfect deodorizer ever invented, and its inventors are deserving of all the praise that a health loving people can give.

SAMUEL L. GARDNER.

FOR SALE BY

BROMO CHLORALUM

NON-POISONOUS.



POWERFUL DEODORIZER AND DISINFECTANT.

Saline Antiseptic, Alterative & Styptic.

ARRESTS AND PREVENTS PUTREFACTION AND CONTAGION.

Used as a Gargle in Diphtheria, Sore Throat, Catarrh and Foetid Breath, as a Wash and Disinfectant in Small Pox, Cancers, Ulcers, Typhoid Fever and all contagious diseases. To remove bad Odors or Gases and Disinfect Sick Rooms, suspend cloths saturated with it diluted. To Deodorize Water Closets, Sinks, Kitchens, Cellars &c., and where any bad or noxious odors should be removed. SEE GENERAL DIRECTIONS.

PREPARED ONLY BY
TILDEN & CO.
New Lebanon, N.Y. & 176 William Street,
NEW YORK

MURRY.

² Bromo-Chloralum.

The want of a certain and perfect Deodorizer and Disinfectant, capable of neutralizing and destroying at once all disagreeable or noxious odors and gases, as well as germs of disease and septic particles floating imperceptibly in the air, has long been felt, and particularly one free from poisonous qualities, so that it could be used under all circumstances — in any and all places, where, during certain seasons of the year, decomposition of organic matter is unavoidable — from which emanate foul and noxious gases, producing disease, pestilence and death.

Many articles have been from time to time proposed and used for this purpose, with varying results, as the salts of Iron, Copper and Zinc, all of which, however, have been found open to the serious objection that, being poisonous, they can only be used with safety by scientific medical men — fatal results having been frequently caused by their use in the hands of persons unacquainted with their dangerous properties.

The same may be said of Carbolic Acid, and its Compounds, known as Phenol Sodique, Chloride of Lime, Chloride of Soda, Sulphate of Zinc with Acetate of Copper, known as "Glyroldin," and other similar articles in a greater or less degree, which, after accomplishing disinfection, leave behind an odor of their own equally disagreeable — frequently more so than that removed — their disinfecting action being due more to their overpowering odor than to their antiseptic property. As a class, too, like the metallic agents, they are too poisonous for promiscuous use, requiring more than ordinary care and skill in their manipulation.

In Bromo-Chloralum

we offer the Profession and Public a certain, effective, quick working deodorizer and disinfectant, FREE FROM ALL POISONOUS QUALITIES and INODOROUS IN ITSELF, and at such a cost as to place it within the use of all without any fear of baneful effects from its use.

It is a concentrated solution of Aluminium Chloride and Bromide, is inodorous and non-poisonous and after repeated trials has been found to be more potent than Carbolic Acid, Chloride of Lime, or the poisonous metallic articles. In contact with fermented, decomposed or fetid matter, it promptly absorbs all ammoniacal and noxious gases and renders the atmosphere and surrounding objects sweet and wholesome. It has been tested in such a variety of cases with such uniform success, that we feel warranted in recommending it to the public for general use, in all places or circumstances that give rise to unhealthy, bad odors which it is unnecessary here to enumerate.

A striking merit of Bromo Chloralum is that it operates by removal and not by creating an odor greater than the one sought to be removed, can be applied in the most simple manner, diluting it according to the object or locality to be purified. Indeed, one great element of its successful operation is the capability of free diffusion, causing it to affect and purify the air as well as the walls, ceilings and floors.

In all Dwellings, the Cellars should be sprinkled with it diluted one part to ten of water; all Drains and Sinks should be rinsed out with it diluted one part to ten or twenty parts of water. It has been demonstrated that one gallon in a barrel of forty gallons of water is sufficient to destroy all offensive emanation in Sewers and Drain Pipes.

In the Kitchen. Suspend Cloths or Sponges moistened with it diluted one part to six or eight of water; it will absorb all odors from cooking.

For Closets, Store Rooms, Meat Safes, Refrigerators and Kitchens. Saturate cloths with one part to ten of water, and hang up, or fill a dish and put it on shelf.

Vegetables, Fruit, Fish, Meat and Butter, that have long been exposed in hot weather or climate, can have their original sweetness restored by immersing them in one part to ten or twenty of water for a short time.

For Hotels. For use in Kitchens, Cellars, Water-closets — and to purify vessels con-

mining swill and refuse matter, chamber utensils, spittoons, etc., — a dilution of *one* part with *eight* parts of water will be sufficient.

In large manufactories, the floors should be sprinkled with a solution of *one* part with *sixteen* parts of water, and in *privies* and all places where refuse or other matter is deposited emitting offensive odors, a dilution of *one* part with *eight* parts of water should be used — care being taken to sprinkle the walls and floors, as well as the substance to be deodorized.

For Butchers. To wash the floor, stands and cart, *one* part to *ten* of water.

For Water Closets and Urinals. Use *one* part to *ten*, sprinkle the floors and basin or vault, or hang up cloths saturated to absorb the noxious gases, and renew when exhausted.

For Cisterns, where the water has become offensive, put half pint in pail of water and sprinkle over the service of the water.

In the sick Chamber it can be used with perfect safety — when the air is impregnated with the unwholesome odors which the patient is obliged to repeatedly inhale, cloths, wet with a dilution of *one* part to *eight*, should be suspended in the room to absorb the noxious odors. A small quantity should be placed in all chamber utensils, before use, diluted *one* part to *eight* of water. It will deodorize and disinfect instantly and completely — thus preventing all danger of contagion therefrom.

Catarrh and Bad Breath. Mixed with *fifteen* parts of water and used as a gargle after meals it will remove bad breath and relieve catarrh.

For Diphtheria, Sore Throat, Catarrh, Canker, Bad Breath.—Use as a gargle, *one* part to *ten* of water, or stronger according to circumstances.

For Chilblains, Fetid Feet or Arm Pits, Frozen Feet.—Use daily *one* part to *five* or *ten* of water.

Toothache.—Moisten cotton with it full strength and fill the tooth.

Mosquito Bites and Poisons.—Wash parts, diluted according to circumstances.

For Cancers, Scrofulous and Fetid Ulcers, Discharges of all Kinds, etc.—Use *one* part to *eight* or *ten* of water on the affected parts and in the room upon cloths or sponges to purify the air.

In Malarial or Fever and Ague districts the Mosquito Nettings placed in the windows, should be sprinkled with Bromo-Chloralum, diluted *one* part to *six* of water, so as to decompose all noxious gases in the air as it passes through, and sponges or cloths should be suspended in various parts of the house, especially in the sleeping apartments.

In Typhoid and Scarlet Fever, Measles, and all contagious diseases, use *one* part to *six* or *ten* of water as a wash to neutralize fever poison. Saturate cloths and suspend in the room; use freely on all bedding and in the chamber utensils.

For Cholera. As a preventive, keep the air in apartments pure and wholesome by suspending cloths or sponges saturated with it diluted *one* part to *eight* of water, use freely on all bedding of patients, and in the room, particularly in the chamber utensils.

In Small Pox. We are advised that patients feel much comfort from the use of a dilution of *one* part to *twelve* or *sixteen* of water as a wash; all speak of its soothing influence when applied to the face or any part of the burning, itching surface. It neutralizes the virus, destroys the loathsome emanations and limits the spread of the disease. Cloths well moistened and hung in the room, and around the patient, absorb all the odor present. Attendants should use the same freely upon their clothes and person.

Uses for the Dead. By covering the body with cloths saturated with this article, with an equal part of water, decomposition will be prevented for a long time. By injecting it undiluted, immediately after death, in the various orifices of the body and then closing them with cotton, it will act as a thorough antiseptic. Cotton, or pounded charcoal in bags, saturated with it and placed in the coffin, will effectually destroy all unpleasant odors, rendering the use of ice to preserve the body till burial unnecessary — by substituting for it an agent attended with far less trouble and expense.

For Dissecting Rooms and Post Mortem Examination, it will be found

invaluable from its quickness and certainty of effect. A dilution of one part with eight parts of water should be scattered over the subject, and may also be used as a wash for the hands to protect from all danger of infection.

Barns, Stables, Cattle Stalls and Yards. Stables should be sprinkled with a weak solution, the manger washed with it, and cloths saturated with it hung up near the heads of the horses will prevent the contagious diseases which are common among them, by absorbing all noxious gases — and in Glanders, syringe the nostrils thoroughly, diluted with one part to ten of water — hang cloths over the head wet with it.

Horses, that have been driven hard and are sweaty and chafed, should be washed with a solution of two ounces to a gallon of water. It will entirely remove all bad odors, heal the chafed places and wounds, and make the animal healthy.

For Animals. A wash of one ounce to a pint of water has been used successfully to swab out the mouth and nose of animals. It completely cleanses the mouth and purifies the breath, and in *mouth diseases* the solution used, one ounce to a half-pint of water, or even weaker, will check the discharge and destroy the virus, as well as assist the healing of the ulcers.

MEDICAL PROPERTIES AND ACTION. — Styptic, antiseptic, alterative, and a powerful deodorizer and disinfectant. Bromine acts largely as an alterative and stimulant to the lymphatic system, thereby promoting absorption — also, as an anodyne, under certain circumstances, relieving hyperæsthetical sensations; and, while it enhances the antiseptic and deodorizing properties of the Chlorine and Aluminium, makes it eminently useful, properly diluted with water, as a topic in *scrofulous ulcers, weak and indolent ulcers, hospital gangrene and highly hyperæsthetical conditions of the throat, diphtheritic affections, gonorrhœa and leucorrhœa, syphilis, itch, prurigo, persistent ophthalmia, puerperal fever, erysipelas, cancerous affections, and as an antiseptic, disinfectant and deodorizer in small pox, measles, scarlatina, typhoid fever, yellow fever, cholera, black vomit, ship fever, epidemic influenza, whooping-cough, indeed all epidemics.*

Letters from Physicians.

Dr. Wells' New Steam Disinfecting Fumigator. Interesting Experiment at Bellevue Hospital.

We are under obligations to Dr. Henry M. Wells, of the U. S. Navy, for his very interesting letter referring to an experiment at the Bellevue Hospital, New York, with his "Steam Disinfecting Fumigator," an instrument which is admirably adapted for use in asylums, hospitals and vessels, where deodorizing and disinfecting are necessary.

Dr. Wells' long experience as Surgeon in the Navy has shown him the great necessity for some simple machine for atomizing and volatilizing deodorizers and disinfectants, so as to diffuse them thoroughly in any apartment where poisonous and infectious odors may exist, and in many instances, such as the holds of ships, disinfecting agents cannot be so well applied in any other way.

In using "Bromo-Chloralum" the effect, even in dispelling the foul odor of Sulphuretted Hydrogen, has been fully demonstrated, and we do not hesitate to recommend the Fumigator for general use in Public Institutions where steam is employed, and although but recently introduced, the machine (which weighs only 12 lbs.) has been received with great favor, and its formal adoption at the Bellevue Hospital, is a sufficient recommendation of its usefulness and value.

NEW YORK December 13, 1871.

GENTLEMEN.—In making the second experiment with my "Steam Disinfecting Fumigator," at the Bellevue Hospital to-day, it was proposed to use the Bromo-Chloralum for the purpose of deodorizing the large clothes room where are deposited the clothes of some 600 to 800 patients. In spite of the best attention to cleanliness in this as in all other apartments of the Hospital, there is necessarily more or less odor emitted from so large a

quantity of old clothing taken from the poorer class of patients when they are admitted to the Hospital.

Previous to commencing the experiment, at my suggestion, Mr. Rice, the chemist, brought in an apparatus for generating Sulphuretted Hydrogen, and the room was filled with this intense odor, in addition to what existed before. The room being in two sections we first placed the Fumigator in the center of one section, and commenced atomizing with Bromo-Chloralum diluted one part to six parts of water.

The effect was to change the atmosphere almost instantaneously, and in a few minutes *remove all the odor of the Sulphuretted Hydrogen, as well as all other odors in the premises.* We then made the same experiment in the other section of the room and with the same — satisfactory results, rendering the whole atmosphere, as attested by all present, perfectly pure and free from any disagreeable smell. Dr. Gouley, Professor of Surgery in the University of New York, Mr. Rice, chemist of Bellevue Hospital, and others present, expressed their entire satisfaction at the result.

I have given these details, as they will be interesting to you and the Profession generally, not only as demonstrating the power of Bromo-Chloralum over the foulest odors, but the superior facilities afforded by the "Steam Disinfecting Fumigator," for the immediate and complete diffusion of the disinfecting agent used, thereby promoting the rapid removal of impure and poisonous odors.

Very respectfully yours, H. M. WELLS, M.D.

OFFICE OF PEORIA HEALTH COMMISSION.

PEORIA, ILL., February 12, 1872.

GENTLEMEN,—It affords me the greatest pleasure to express to you my fullest satisfaction regarding your new article, Bromo-Chloralum, a Disinfectant and Deodorizer which, by no chemical compound at present, can be surpassed.

Afflicted as our community is, and has been for the last few weeks, with Variola, I forthwith made it a duty in every family to use it extensively as a means to limit the epidemic within as narrow a compass as human efforts are able to do, and I am glad to say I have succeeded so far.

In the sick rooms and wards of our City Hospital, it has fully done what your circulars are promising, and, in order to believe what beneficial effects the application to the exanthematous surface of a diseased person, of said chemical compound is exerting, one must see, and having seen must do all in his power to propagate its use universally.

As you claimed it to be non-poisonous, I am free to say that I ventured to exhibit it, in doses adapted to age and circumstances, internally, and learned that it had the soothing effects of Bromide of Potassium, with such as were highly excited from either vascular orgasm, or the nervous centres.

In this way I felt prompted to use it also in a case of a secondary character manifest by *Rhynchia* all over the body with *Exostoses* on both frontal bones and *Osana*, and, to use the words of my patient, the result was admirable. What no medication in the period of four years effected, the Bromo-Chloralum, internally used as a medicine and as an external application, made her skin clear from all ulceration, her breath sweet, and reduced the nose from the shape of a cucumber to its natural dimensions. I hope to be able to give you in a short time the report of some other cases treated in a similar way in the Peoria County Alma House.

With a similar surprising effect the Bromo-Chloralum has been used in our City Hall — in the City Prison — in the Court House and Jail, — in verification of which, His Honor the Mayor of the City, and the Chief of Police, take pleasure in signing with me this well deserved testimonial.

Gentlemen, I have the honor to be, respectfully yours,

JNO. N. NIGLAS, M. D., Health Officer of the City and County of Peoria.

P. R. K. BROTHERRSON, Mayor.

S. L. GILL, Chief of Police.

JOHN WAUGH, Supervisor at Large.

"The City Board of Health has introduced the Bromo-Chloralum as a Disinfectant and Deodorizer into all our public establishments, Jails, Calaboose Hospital, City Hall and County Alms House, and, as far as I can learn, in all these places it has given the greatest satisfaction.

I have used it in some cases of Secondary Syphilis, as a means of dressing the Sores; had it applied by means of injection into the nostrils and frontal sinuses of a man with Syphilitic Ozoena, and found that there is nothing superior to your Bromo-Chloralum as a deodorizer and even healing application.

I have recommended it to all members of our *City Medical Society* as well as to families as a prophylactic in the loathsome disease of *Variola* to be used as a disinfectant of articles or persons having been exposed to, or likely to come in contact with the contagion.

Mr. Snyder of the County Alms House used it with the following results: *Sour and offensive vomit*, tested one part to twelve of water, odor removed in two or three minutes.

Evacuation in Bed, tested on bed-clothing, sprinkled room, all offensive odor removed in five minutes.

Bad odor in Hospitals, morning; sprinkled floor, odor entirely removed in few minutes.

Bad odor of Breath removed almost entirely, so far as I can smell, by use of one to twenty-five of water, then one to twenty, then one to twelve."

REMARKS. — Bromo-Chloralum works by diffusion and contact; the dilution should in all cases be one part to six or eight of water. In *Sick Rooms*, Hospitals, Wards and Halls, Bed Rooms, or any room where the air is confined and ventilation difficult cloths, say two feet square, should be suspended, moistened with a dilution of one part to eight or ten. All the unpleasant odors and gases will be absorbed and decomposed.

T. & Co.

PERKSKILL, N. Y., August 10, 1871.

GENTLEMEN, — The package of *Bromo Chloralum* which you favored me with some time ago, has been carefully used by myself, and some of my medical friends with the following results:

1. *As a certain, perfect and prompt deodoriser* it is far superior to any article of the kind we have ever employed, not excepting carbolic acid. The most noisome and disagreeable odors are instantly destroyed by its application, while itself leaves no unpleasant smell behind. I find that a solution, made by adding one part to twenty of water, placed in sinks, water-closets, sewers, cesspools, etc., immediately removes all unpleasant smell.

2. *As a disinfectant* I have used it successfully in *typhoid fever* and other infectious diseases. I have no doubt it is destined to take the precedence of chloride of lime, zinc, soda, carbolic acid, the poisonous mineral salts, and all other agents hitherto introduced for this purpose. The experience of my medical friends, also, coincides with my own on this point. One great advantage it possesses over all other agents I have ever used is, that its inhalation causes no feeling of irritation in the air passages and lungs. It is not only safe and non-poisonous, but absolutely free from all disagreeable effects whatever.

3. *As a general deodoriser and disinfectant* for all manufactories, where decomposing animal or vegetable materials are used, it must prove invaluable, — also as a *Sanitary agent* for Boards of Health, in our large towns and cities, who will, I believe, find it both more efficient as well as more economical, than most other articles hitherto employed.

4. *For Hospital Use*, also, I think it must prove very useful for various purposes; among others as a wash for offensive sores and ulcers, sloughing gangrene — cancers and offensive discharges of all kinds; also for disinfecting clothes and bed clothing, bedding, and for general deodorant and disinfecting purposes.

5. Regarding then the *Bromo-Chloralum* as altogether the most valuable article of the kind hitherto introduced into practical medicine and hygiene, I most cheerfully and confidently recommend its use to the profession and the public.

CHAS. A. LEE, M.D.,
Professor of Hygiene and Materia Medica.

STEPHENTOWN, N. Y., August 2, 1871.

GENTLEMEN,—I was called July 4th, to attend a lady who had been thrown from her carriage against a post, producing a severe concussion of the brain and a double fracture of the femur. My patient remained in an insensible condition the following ten days, during which time the evacuations were necessarily involuntary and made her bed and room very offensive in spite of the precautions of her attendants. I directed the use of your *Bromo-Chloralum* in the following manner: dilute the *Bromo-Chloralum* with one part to ten of water—wet thoroughly cloths with it and place them around the bed and person to receive the evacuations, and also wash the parts with it after the removal of the cloths. To the utter astonishment of myself and all connected with the case, all offensive odors were neutralized, and nothing but pure atmospheric air was in the least perceptible in the room. I have also used the *Bromo-Chloralum* in child-bed sickness to my great relief from all the offensive odors which usually attend such cases.

I have also caused it to be used in the chamber utensils, of the same strength, with the effect of destroying all noxious odors usually arising therefrom. Every physician who will use this article will appreciate its value in his exemption from the disagreeable odors and foul air he is almost daily compelled to breathe in his practice.

Yours, G. H. DICKINSON, M.D.

IOWA HOSPITAL FOR THE INSANE, AT MOUNT PLEASANT, IOWA, Dec. 12, 1871.

GENTLEMEN,—I have made some careful observations of the effect of the *Bromo-Chloralum* you kindly sent to me, and have been much pleased with it. It has proved very effective in removing the odors from rooms that have been defiled by unclean patients without leaving any odor of its own, which is such a serious objection to most other disinfectants. It is also useful in sick rooms, and in the chamber utensils of sleeping rooms, or any place where there is any defect or want of active ventilation.

It has also proved effective here in preventing decomposition, and preserving a corpse beyond the time they can ordinarily be kept, even in cool weather. Two or three folds of cloth laid over the face, or any part of the body, and kept moist, will prevent any noticeable change for several days, and preserve the features in a remarkable manner.

Although I have not found it necessary to try it, I should expect that, if injected into the cavities of the body, it would prevent decomposition for a long time.

Very respectfully, MARK RANNEY, M.D., Supt.

FOREST CITY, MARINE HOSPITAL, SAVANNAH, GA., Jan. 9, 1872.

GENTLEMEN,—According to promise we have tested the *Bromo-Chloralum*, both in our hospital and out-door practice, and found it to act admirably, answering our expectations both as a disinfectant and as a healing application to foul ulcers, wounds, burns, etc.

We would especially recommend it as a gargle in ulcerated sore throat, relaxation of the mucous membrane of the throat, *fames uvulae*, *velum pendulum palati*, and as an injection into the rectum, vagina and urethra, as being inodorous, almost tasteless, and less irritating than the chlorinated or carbolate of soda or any other caustic or astringent applications in use.

Respectfully, W. M. WALSH, M. D. } Surgeons in Charge.
 J. D. WALSH, M. D. }

SAVANNAH, Ga. Oct. 19, 1871.

GENTS, — I take pleasure in stating that I have used on several occasions, with the most satisfactory results, your excellent preparation of Bromo-Chloralum. Its use is to be commended as a safe, agreeable and successful Antiseptic, Disinfectant, Deodorizer and Detergent, and it will unquestionably supersede the preparations of carbolic acid, chloride of soda, and permanganate of potassa for sanitary, hygienic and therapeutical purposes. It is well suited to the treatment of some diseases of the zymotic class, and is a most valuable agent in the treatment of Ozena, Caries of the bones, obstinate and indolent ulcers of the extremities; and will in fact fulfill the indications of the medical and surgical treatment in the strumous diathesis, and in the wasting diseases of children.

In connection with the "Bromo-Chloralum" I would state that I have experienced good results in Rheumatic and other diseases of the blood, from the use of the pleasant and delightful preparation of the "Compound Elixir of Iodo-Bromide of Calcium," introduced in this form to the Profession by you.

A. J. SEMMES, M. D.

Professor of Physiology in the Savannah College of Medicine.

FOREST CITY MARINE HOSPITAL, SAVANNAH, Ga., Oct. 19, 1871.

GENTLEMEN, — I have used your preparation of Bromo-Chloralum in hospital and private practice, as a deodorizer and disinfectant, and found it superior to any agent of the kind now in use. It has no equal in syphilitic sore throat; as an application to ulcers generally, it has satisfied me better than any thing heretofore used.

W. M. WALSH, M. D.

IOWA CITY, Iowa, Dec. 20, 1871.

GENTLEMEN, — Our dissecting rooms are so situated that it is desirable to avoid any odor arising from them, either from the materials or from the disinfectant. We gave the samples of Bromo-Chloralum a fair trial and found it fully to answer our purpose. It prevented all emanations, and in a very short time completely deodorized the rooms. I think it will prove invaluable to us.

Yours truly,

P. J. FARNSWORTH, M. D.

Prof. Materia Medica, Iowa State University.

CHICAGO, Feb. 26, 1872.

GENTLEMEN, — We take pleasure in forwarding to you the following extract from the minutes of the meeting of the CHICAGO ACADEMY OF MEDICINE, held February 19, 1872.

"The committee appointed to test the samples of Bromo-Chloralum (kindly furnished by your agent, Mr. A. M. Pett), reported that they had tried the article in the dissecting room, and also in the hospital, with gratifying success, and offered the following, which was adopted:

"Resolved, That the CHICAGO ACADEMY OF MEDICINE endorse the Bromo-Chloralum, and recommend it as an efficient and reliable disinfectant and deodorizer."

W. DANFORTH, M. D., PRESIDENT,

E. A. BALLARD, M. D., TREASURER.

MOBILE, Ala., Feb. 18, 1872.

This is to certify that the "Bromo-Chloralum," is of the most valuable aid in our dissecting rooms as a "Disinfectant."

All our students who have used it, were highly delighted with the same; for, if applied to their hands *diluted*, it cleansed them perfectly.

JOSEPH H. SCOTT,

Junior Ala. Medical College.

CHICAGO, Nov. 24, 1871.

GENTS,—I take pleasure in commending, after frequent observations of its effects, your preparation of *Bromo-Chloralum*, as an exceedingly efficient and pleasant disinfectant and deodorizing agent.

It is entirely devoid of odor or of irritant effects, so that it can be freely used in residences, hotels, etc., at the same time it is very useful as a local application in many cases of wounds, etc., when, from causes readily appreciated by physicians, the solution of Carbolic Acid proves injurious.

I remain with high respect, yours, etc.,

J. ADAMS ALLEN, M. D.

CHICAGO EVENING JOURNAL, *Friday, Feb. 16, 1872.*

The New Disinfectant, *Bromo-Chloralum* is to be commended in almost unqualified terms. Whether as an *antiseptic*, disinfectant, alterative or deodorizer, it has proven successful in accomplishing the purposes for which it has been used. For all sanitary purposes, whether in private families or for hygienic public uses, it has no equal. The great advantages it has over other preparations designated for the same purpose is, that while its efficacy is greater, the objections are less, because it has no odor, and is not poisonous. It is used in our City Hospitals and by the Board of Health.

JOURNAL OF MATERIA MEDICA, *May, 1872.*

Mrs. ———, of delicate constitution, gave birth to a premature fetus; subsequent to which an exhausting and very fetid discharge from the genitals confined her to the bed for ten weeks. The atmosphere of her room, notwithstanding the most vigilant efforts to insure ventilation and cleanliness, was extremely offensive. From constantly inhaling so much impurity, the patient was afflicted with anorexy, nausea, and every morning with emesis. This train of symptoms, having continued so long, caused marked anemia, alarming exhaustion, and a somewhat doubtful prognosis. Having been summoned to visit the patient under these circumstances, I directed quinine and iron three times a day, Ferrated Wine of Wild Cherry before each meal and an injection of *Bromo-Chloralum*, diluted one part to sixteen parts of water, for the vagina morning and evening. The result was most gratifying to the patient and her attendants. The atmosphere of the room was perfectly free from any unpleasant odor after the use of the injections of the *Bromo-Chloralum*, and the vaginal discharge notably diminished. After a few visits, I dismissed the patient as convalescent, with directions to continue the prescription for a week or two as circumstances might indicate.

A more prompt response than was manifest from the use of *Bromo-Chloralum* in this instance I never witnessed from any medical agent. I think this remedy more inservient to restore similar cases than any other agent in the catalogue of the *Materia Medica*.

J. BATES, M. D.

WINONA, Minn., *Jan. 10, 1872.*

DEAR SIR,—Since my attention was called by you to the new disinfectant, *Bromo-Chloralum*, I have used it considerably, and with the most satisfactory results.

During an epidemic of malarial fever in Sept. last, I am quite certain that I saw its effects in counteracting the influence of malarial poison, in several instances, also in removing to a great extent the peculiar fever odor which accompanies such diseases.

I have also used it in one case of cancer of the face, where its disinfecting properties were most gratefully acknowledged.

I have put it to a new use which I had not previously seen recommended, but which

struck me as being rational, that is its therapeutical powers in the last stage of gonorrhoea, forming an injection of this kind:

Bromo Chloralum, $\frac{1}{2}$ ounce.
Glycerine, 1 ounce.
Aque, 3 ounces.

It is used without pain, therefore is perfectly harmless as regards producing stricture, and it seems to cleanse the mucuous membrane, and assist the parts to heal faster than any thing I have ever tried. I can therefore say that so far as I have experimented, as a disinfectant it has no equal, and am also led to believe that it has undiscovered properties which will give it rank among our most valuable articles of *Materia Medica*.

I am, yours very truly,

D. A. STEWART, M. D.

WINONA, MINN., Jan. 19, 1872.

Your preparation of Bromo-Chloralum has been used freely in my practice for the last six months. It is to be commended in almost unqualified terms,—whether as a styptic, astringent, antiseptic, disinfectant, alterative or deodorizer, it has been successful in accomplishing the purposes for which it has been used; as a gargle in diphtheria, or scarlatina, as a nasal douche in catarrh, for inhalation in chronic bronchitis, for injections in leucorrhoea and gonorrhoea. For all sanitary purposes, whether in private families or for hygienic public uses, it is unsurpassed in efficacy. The great advantage it has over other preparations designed for the same purpose is, that while its efficacy is *greater*, the objections to it are *less*, on account of its unirritating, non-corrosive, and odorless qualities.

Yours respectfully,

W. W. D. RICHARDSON, M. D.

BALTIMORE, May 30, 1872.

GENTLEMEN,—I have given Bromo-Chloralum a pretty thorough trial as a Disinfectant and Deodorizer, and am pleased to say it surpasses my expectations in both these respects. Indeed, I regard it superior to the articles heretofore in use by the profession for such purposes.

In thus complying with your request, to give the results of my experience with this article, I feel that I am doing an act of simple justice to our fellow citizens, in aiding, so far as my name and influence may extend, in the general use of a most valuable hygienic agent.

Very respectfully yours,

HARVEY L. BYRD, M. D.,

Professor of Obstetrics in Washington University, and Lecturer on Hygiene in the Grammar Schools of Baltimore.

EXTRACT FROM LETTER FROM PROF. NATHAN R. SMITH.

BALTIMORE, June 9, 1872.

I am using the Bromo-Chloralum as a disinfectant and antiseptic, and regard it as the best for those purposes.

Yours,

N. R. SMITH, M. D.

CHICAGO, ILL., Feb. 16, 1872.

DEAR SIRS,—While in charge of Madison street barracks, I had occasion to try your preparation of Bromo-Chloralum, and found it in *every instance* a very valuable and pleasant deodorising and disinfecting agent. I see no reason why it should not become very valuable also, in the treatment of those diseases where such a remedy is indicated.

Respectfully yours,

WM. J. MAYNARD, M. D.

WARSAW, INDIANA, March 4, 1872.

GENTS,—Being a true friend to the advance of the science of medicine, I cheerfully lend my influence by recommending to the public generally, and especially to the medical profession, the use of the Bromo-Chloralum as one of the greatest discoveries of the age, as a safe and pleasant disinfectant for general use.

A. WOOLEY, M. D.

GREEN BAY, WIS., Feb. 27, 1872.

GENTS,—I am delighted with your Bromo-Chloralum as a disinfecting agent. I am using it with the happiest results in the sick room.

Respectfully yours,

G. ALLEN LAMB, M. D.

EATON RAPIDS, EATON CO., MICH.

I have given your Bromo-Chloralum a trial, and find it equal to, and I think better than any agent of this character I ever used.

Yours, etc., A. K., M. D.

[Extract from letter of C. D. MANNING, M. D., of Camanche, Iowa.]

Sept. 4, 1871.

"Accept my thanks for the samples; they are all that could be desired in my experience thus far.

The 'Bromo-Chloralum' is the most elegant disinfectant I have ever used. I shall never do without it in my practice."

[Extract from letter of WM. H. GILL, Esq., Gainesville, Ala., Jan. 15, 1872.]

"The Bromo has been used extensively in this vicinity as a wash for ulcers, and gives complete satisfaction."

[Extract from letter of DR. C. F. BRADLEY, West Stockbridge, Mass., Jan. 12, 1872.]

"I am exceedingly well pleased with the effect of the Bromo-Chloralum. I am using it in the sick room with complete success."

[Extract from letter of F. E. CLARKE, M. D., Mount Vernon, Ohio, Jan. 10, 1872.]

"The Bromo-Chloralum seems to me *perfect* as a disinfectant."

Bromo-Chloralum in Scarlatina.

CHICAGO, ILL., February 22, 1872.

GENTS,—Having had an extensive opportunity, particularly in the treatment of Scarlatina, to test the merits of your Bromo-Chloralum, I can say that it has no rival as a disinfectant and deodorizer.

By its prompt use Scarlatina has been restricted to a comparatively few cases to what it would have numbered, had not the Bromo-Chloralum been timely and thoroughly used (as it was extensively used in Centre Avenue Barracks under the auspices of the Chicago Relief and Aid Society).

It is an excellent preparation in the treatment of chronic ulcers. In the fever room it vindicates all that is claimed for it. In repeated cases, where it temporarily was not supplied, patients have asked for "more of that preparation that purifies the room."

I am respectfully yours,

C. J. ADAMS, M. D.

[Extract from letter of HUGO ANDRIJSEN, Esq., Beaver, Pa., Dec. 15, 1871.]

"Your Bromo-Chloralum seems to be a decided success. They use it now effectually in Variola and Scarlatina. It is generally preferred to either Carbolic Acid, the Permanganate of Potash or Labarraque's Solution."

From the St. Louis Medical and Surgical Journal.

Dr. H. G. Lachmund, of Sauk City, Wis., in a letter to us, remarks, that he has had opportunities for making observations, and finds *Bromo-Chloralum* superior to all other agents he has used. "A small quantity, say a drachm, put in the night-stool, or properly

exposed in the sick room, removes all odor, and as a disinfectant is no less valuable. The last three months this place has been visited by Scarlatina, not very extensive, but in some cases malignant. Sore throat, Ozena, Otorrhoea, were the commencing symptoms, indicating the beginning of a malignant and fatal epidemic.

"To prevent, if possible, its spreading abroad, no rational physician would now think of giving belladonna, once so highly recommended. Being anxious to do something to prevent the spread of the disease, I resorted to Bromo-Chloralum, using it freely in the vessels, and hanging napkins in the sick-room wet with a solution of this disinfectant. In this way I have treated all the families in my care except one — in which latter family every member had the disease, taking it from the *first case*, while in all the other families where Bromo-Chloralum was used, only the cases first occurring had the disease, the other members of the families escaping, notwithstanding they had free access to the cases first attacked and had not previously had the disease. These means seemed truly prophylactic; the cases were milder where it was used and not followed by the usual sequelæ, as Dropsy, etc.; none died; the most left the bed on the ninth day. As to Dropsy, I have confidence in greasing with *bacon* as a preventive and always have it applied to my scarlet fever cases of all kinds. (First recommended by Dr. Schiermaan.) According to my observation, Dropsy is more frequently a sequela in severe than in mild cases, and if Bromo-Chloralum proves prophylactic, in so far as to prevent the more malignant forms of the disease by neutralizing or destroying the contagious elements as they emanate from the sick, it is of the greatest importance." It may be that the bacon greasing was useful in preventing the sequela of Dropsy, or the Bromo-Chloralum, by rendering the cases milder, obviated this distressing sequela. Whatever theory of its action may be finally embraced, the reporter believes it demonstrated in his field of observation that Bromo-Chloralum is preferable to all other agents yet discovered as a deodorizer and disinfectant.

Bromo-Chloralum in Cancer.

HERMANN, GABONADE Co., Mo., Sept. 22, 1871.

GENTLEMEN, — Having given a full trial to the new disinfectant, "Bromo-Chloralum," recently introduced by you, I feel it due to the medical profession to report the results of its action in my experience.

1st. In a confirmed and obstinate case of Cancer I have used it as a lotion with great success, its effect being to destroy the offensive odor always attending such cases, besides having a specific action on the sore itself, so that my patient has been greatly benefited and improved by its use.

2d. In a severe case of *Hemorrhagia Uteri*, I have applied it as an injection, moderately diluted, with the happiest results.

3d. Used in the same way I have found it highly beneficial in the treatment of Gonorrhoea and Leucorrhoea.

4th. I have administered it in a case of Pulmonary Consumption combined with Cod Liver Oil and Syrup of Squill, according to the following formula :

R	Cod Liver Oil.....	oz. vi.
	Syr. Squill.....	oz. i.
	Bromo-Chloralum.....	drachm i. — M.

Dose. — A table spoonful three times a day and have found its action more satisfactory than that of the two former agents alone.

I have no hesitation in commending it most cordially to the medical profession and the public as the best disinfectant and deodorizer as yet introduced — far preferable in all particulars to Chloride of Lime, Carbolic Acid and the poisonous Metallic Salts.

Very respectfully,

AUG. NASSE, M. D.

PREECKILL, N. Y., Dec. 13, 1871.

I have just been using your New Disinfectant, *Bromo-Chloralum*, as a *Deodoriser* in a case of large *cancerous* ulcer invading a large portion of the face and jaws, where the

odor was so offensive and provoking as to fill the whole house and prevent the friends of the patient (an old lady of above 70 years of age) from visiting her.

The odor also sickened the patient herself and prevented her from taking nourishment. In short, she was a nuisance to herself and all around her.

Thinking it a good case for your deodorizer, I directed her son to wet napkins in a dilution of it, one part to ten of water, and hang in the room in the vicinity of the patient, changing every hour or two. On doing so the smell before so offensive was entirely removed; the atmosphere of the room and the house became as sweet and pleasant as that out doors. It is now more than a week since it was commenced, and although it has not been applied to the cancerous sore, no disagreeable smell has been perceived in the room or the house, and the relief to the family, and to the patient herself, is beyond description.

I hope other practitioners will try it in similar cases, and think there can be no doubt they will find it equally effectual.

Yours truly, CHARLES A. LEE, M. D.

Dr. Pierce writes as follows :

RUTLAND, VT., Sept. 19, 1871.

MY DEAR SIR,—I have made constant use of your disinfectant, "Bromo-Chloralum" in the case of the patient that I am attending, suffering with Cancer, at this place. It works like a charm, and keeps the air perfectly pure.

I am also using the "Iodo-Bromide of Calcium Comp." as a lotion and the Elixir of the same internally, in the same case with the happiest results. They have far excelled my expectations. My patient is greatly improved, and able to walk about his room. I would like to have you send me the same amount of "Bromo-Chloralum" and of the Elixir, for the patient, that you left me on your visit here, as I am very nearly out of both.

Yours respectfully,

H. H. PIERCE, M. D.

The Bromo-Chloralum was used in a severe case of CANCER at Rutland, Vt. We give the following correspondence explaining its mode of use and results :

On a late visit to Rutland, Vt., in company with Dr. Pierce, at the request of the attending physician, Dr. Pond, I used the article in a small and imperfectly ventilated room occupied by a patient who has suffered with a CANCER for three years past, his chin and lower lip being one running ulcer, the odor of which was so fetid and disagreeable that but few could remain in his room for any length of time, even after using the ordinary disinfectants. I wet a cloth of about four feet square with a dilution of one part to six of water which was suspended near his bed; all foul odors were almost instantaneously removed, rendering the air odorless. Upon again visiting the room, after an absence of fifteen minutes, no trace whatever of the disagreeable smell could be perceived, greatly to the surprise of every one present, as well as the comfort of the patient and his family.

J. A. McMAKEN, Chemist.

IOWA CITY, IOWA, December 19, 1871.

GENTLEMEN,—Through the politeness of your agent, Mr. A. M. PATT, I have been furnished with a sample of your new disinfectant, "Bromo-Chloralum."

This I have tried in a case of Uterine Cancer, in which the discharges were very offensive. I find it to answer the purpose admirably, removing all offensive odors in a few minutes after its use.

I take pleasure in recommending its use to my professional brethren as being the disinfectant that has met the indications perfectly in this case.

Yours respectfully,

J. C. SHRADER, M. D.,

Prof. of Obstetrics and Diseases of Women and Children,

Medical Department, Iowa State University.

[Extract from letter received from G. W. GAINES, M. D., of Franklin, Simpson Co., Kentucky.]

"I have been using your Bromo-Chloralum in Cancer of the mouth and chronic tonsillitis, and find it a most valuable palliative in one and curative in the other."

[Extract from letter received from S. INGRAHAM, M. D., of Walworth, Wayne Co., N. Y.]

"I received your samples of Iodo-Bromide Calcium Compound and Bromo-Chloralum. In a case of Cancer, the first named is acting like magic. The other is all you recommend it to be."

Bromo-Chloralum in Small Pox.

We are advised that patients feel much comfort from the use of a dilution of one part to twelve or sixteen of water as a wash; it seems to lessen the itching, and cools them nicely by neutralizing the poison.

Cloths well moistened and hung in the room and around the patient, absorb all the odor present in such cases, and prevent contagion.

Attendants should wash themselves with a dilution, and also use a similar dilution as a wash for the mouth and throat.

APOLLO, ARMSTRONG CO., PENN., Nov. 26, 1871.

GENTLEMEN, — I have faithfully tried the Bromo-Chloralum and Iodo-Bromide of Calcium Compound, which you were kind enough to send me, and I must say they are fully equal to your recommendation. Incidentally I may mention that I have used the Bromo-Chloralum in disinfecting the rooms of some *small pox* patients, where it answered a most admirable purpose, and I am of opinion that it materially aided in preventing the spread of the disease. But two cases of this disease have occurred in my practice this season. The first of these was an importation from our neighboring city of Pittsburgh. The only one that contracted the disease from him was his brother, who was not and *would not be vaccinated*. The rooms of both these patients were disinfected with the Bromo-Chloralum, and its effects were so marked as to excite the surprise and admiration of the relatives of these patients, who witnessed its use. The loathsome emanations from the patients were so far subdued as to render the task of nursing them comparatively easy.

With much respect, yours truly, WM. B. ANSLEY, M. D.

SHELANDOAH, PA., March 2, 1872.

GENTS, — I take pleasure in stating that I have used in severe cases of Small Pox, and with the most satisfactory results, your invaluable preparation Bromo-Chloralum. I can and do recommend it to the profession at large, of all schools, as the best and most reliable disinfectant and deodorizer we have, and ere long I expect to see it used universally, superseding all other disinfectants.

I have also used it as a gargle in a number of cases of Diphtheria, and it proved to act quickly, and was more pleasant to take than Permanganate of Potassa which I had been using prior to this.

One case of syphilitic sore throat I cured with its use when all other things failed. This statement you are welcome to use as you wish.

Yours most respectfully, E. N. HARPELL, M. D.

NORTHAMPTON, MASS., Oct. 3, 1871.

GENTLEMEN — There are two cases of Small Pox in Holyoke. I called on one of the Selectmen — he stated that a bottle had been given him — that he had used it only for one day, and was perfectly surprised at its results. In one case of a man sick, and very sick, — so much so that he had not been able to sleep for the past three nights, — and that after using it — by hanging a cloth in the room — sprinkling it about his room and bedding,

as called at the Pest House at 8 o'clock last evening and found the man very comfortable and feeling sleepy. He then ordered him bathed with it—1 to 16,—and this morning found his man up and dressed, stating that he was so smart he thought he should go out in the yard to-day.

The other case was so severe that the man was *blind*, his face being so swollen, and he was at times delirious. He ordered cloths saturated with it, 1 to 12, placed upon his face,—and this morning the inflammation had subsided, so that he could see;—is perfectly delighted with it.

WINONA, MINN., Jan. 22, 1872.

DEAR SIR, — I used the new disinfectant, Bromo-Chloralum, in our City Hospital, where we had two cases of small pox, and was much surprised at its effects as a purifier and disinfectant; all offensive odors and emanations seemed to be under subjection in a few moments after its application.

As a WASH the patients found it agreeable and desired a frequent application of; while it is without odor and free from all poisonous qualities, it is the most *powerful disinfectant* I have ever used.

J. M. COLE, City Physician.

MCKENA, ILL.

DR. W. D. STURTEVANT says: I have used the Bromo-Chloralum in a case of Small Pox, with most wonderful results. The patient's face was one mass of scab or pustules. he could not *open* his eyes, nor could he *hear*. I treated him as follows:

R. Bromo-Chloralum,

Glycerine aa one scruple.

Aqua aa Oj. M.

With this I bathed his face, and applied it to his ears with cotton. In a very short time he could see and hear distinctly. It allayed the itching and removed all foul odors. I think the New Disinfectant one of the best remedies that this or any age has any record of.

GREENBURY, IND., May 28, 1872.

GENTLEMEN, — I have been using your Bromo-Chloralum in Small Pox, for the last six months, and must say that I am pleased with its effect, as I find it not only a disinfectant, but an alleviator of pain also. And I do think it much preferable to Carbolic Acid, for it acts more promptly and its effects last longer. It can also be used where the Acid cannot. For ulcers and diseases of the skin I have found nothing to equal the Bromo-Chloralum.

J. Y. HITT, M. D.

Miscellaneous Testimonials.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., Oct. 17, 1871.

GENTLEMEN, — An experiment with your new Disinfectant, Bromo-Chloralum, was made yesterday, and more than confirmed my previous impression of the great value of this article for general use in large Public Buildings.

We took *three* pints of the Bromo-Chloralum, adding *three* gallons of water, this dilution was applied in one of the rooms of this Building having 5 urinals and the same number of water closets. The odor from this room was such as to be noticeable outside in the hall, and inside, was always very disagreeable in spite of all proper means of ventilation, etc.

I witnessed the first application of the disinfectant, and with others present, expressed my surprise at the almost magical results obtained in less than five minutes, and within thirty minutes, on going out and coming back, could not detect any of the foul odor, and the atmosphere was pronounced as sweet and pure as the office rooms.

I cheerfully recommend the use of this article to officers of Public Buildings generally.

AUG'S JORDAN,

Chief Engineer, Post Office Building

[Copy.]

CITY CLERK'S OFFICE, ROCHESTER, N. Y., Sept. 30, 1871.

In Board of Health, Sept. 29, 1871.

BY COMMISSIONER AIKENHEAD :

Resolved, That having tested and tried the Bromo-Chloralum, non-poisonous disinfectant, and this Board being satisfied of its utility as a disinfecting agent, do hereby recommend the health inspectors to use, and recommend the same to those having occasion to purify any offensive, poisonous or noxious odors and gases in and about any dwellings, barns, stables, drains, kitchens, cellars, water-closets, etc. The foregoing is a true copy from the minutes.

WM. F. MORRISON, City Clerk.

HEALTH OFFICE, LOUISVILLE, KY., June 6, 1872.

"Bromo-Chloralum" as a deodorizer has no equal. Will let you know at some future time as to its disinfecting properties.

Am under great obligation for specimen samples sent me.

Truly, etc.,

SAMUEL MANLEY, Health officer, Louisville, Ky.

OFFICE OF THE COMMISSIONER OF PUBLIC SCHOOLS.

BALTIMORE, June 5, 1872.

MESSRS. TILDEN & CO. :

GENTLEMEN,—I take pleasure in certifying to the great value of Bromo-Chloralum as a Deodorizer and Disinfectant. I have used it in the Public School Rooms of our city, and in sick rooms where the patient was suffering from Small Pox, with very gratifying results. All offensive odors are removed by its use. As a styptic I prefer it to persulphate of iron. Its decided superiority over all other Disinfectants consists in the certainty of its action, and from its being inodorous and non-poisonous.

I am, Gentlemen, very respectfully, your obedient servant.

A. W. DODGE, M. D.

DR. LANG'S DENTAL PALACE.

BALTIMORE, MD., June 6, 1872.

GENTLEMEN,—I have been using in my practice for several months your "New Disinfectant Bromo-Chloralum," I have tried it in an aggravated case of Abscess of the Maxillary Sinus, in which the discharge was most offensive,—with the happiest result.

I use it for all diseases of the gums and Alveolar processes, and after the extraction of teeth, and the removal of Salivary Calculus,—removing in a few minutes the offensive odors that always annoy so much, not only the patient, but those near them.

In the office of the Physician, Surgeon and Dentist, I regard it a great national blessing.

Very respectfully,

T. F. LANG, No. 50 North Calvert St., Baltimore.

Use of Bromo-Chloralum for absorbing the Injurious odors of Paints, &c.

UNION SIGN WORKS, ST. LOUIS, MO., Jan. 17, 1872.

GENTLEMEN,—We are compelled to use in our works, some disinfectant and deodorizer, and after trying most of the common ones in use *with no success*, we were induced to give your Bromo-Chloralum a fair and impartial trial. We did so by adding to one part of the Bromo fifteen parts of water,—saturating sponges and cloths in the mixture and hanging them up in different parts of the works.

Upon opening the works next morning, our employees, as well as ourselves, were very much surprised to find no odor arising from the turpentine, benzine and paint, as was common.

We know this preparation to be a valuable one, and will recommend its use to our profession.

Respectfully,

JOHN WINGATE, President.

PUT UP IN PINT BOTTLES.

Letters from Prof. BAKER

ON THE

CHEMISTRY

OF

BROMO-CHLORALUM,

TO

SURGEON WELLS OF U. S. NAVY.

ALSO, TESTIMONIALS IN REGARD TO ITS

DISINFECTING AND DEODORIZING PROPERTIES

FROM

PHYSICIANS AND SURGEONS.

WILLIAMSBURGH, N. Y., Dec. 18th, 1871.

DR. H. M. WELLS,

U. S. Navy. Brooklyn, N. Y. :

Dear Sir,—

The subjects presented in your letter invite extended discussion and if the consideration they merit was accorded to them, it would furnish sufficient matter to form a very voluminous work.

As the action induced in the process of "deodorizing," "disinfecting" &c., varies according to the agent employed, it is impossible to make a general rule applying to all substances possessing such characters, but one may acquire a general knowledge of their mode of operation upon special well known principles.

It is a theory of chemistry that any body of *organic* constitution (especially if one of its elements be nitrogen) is subject to enter into spontaneous decomposition under mild influences, such as a certain range of temperature, the presence of moisture, the action of direct, or diffused light, or contact with another body of like feeble structure.

The reason for such properties is founded upon the fact that, for the most part, the greater the number of chemical elements existing in combination to form a particular body, the more feeble becomes the chemical affinity that compels such combination, and should nitrogen be one of those elements, then the chemical constitution is rendered very much less stable, because nitrogen is very feeble in all its affinities.

Those bodies which emit foul odors are of *organic* structure and it is during the progress of what we call "spontaneous decomposition" that these odoriferous compounds are evolved; so that any substance placed in contact with the decomposing matter, which arrests chemical dissolution, or putrefaction by *displacement, substitution, elimination, direct combination, mutual decomposition*, or by *inducing a change of molecular structure*, or *Catalysis*, thereby forming a *new and stable compound*, may justly be styled a "Deodorizer."

The bodies of most frequent occurrence, and that exist in excessive quantities, which exhale offensive odors during decomposition, are the animal and vegetable tissues, as Albumen, Gelatine, Fibrine, Caseine and a vast number of nitrogenous compounds from the blood, bile and excrementitious substances at slaughter-houses and provision stores, and also fecal and urinary matter in water-closets, urinals, &c., besides the unexamined products of decomposition in cesspools, sinks, offal barrels, casks and the like.

The term "disinfectant" is often employed as though it indicated, or implied Anti-infection, but it seems that its meaning might with propriety be extended to substances which induce the chemical destruction of, or removal from, infected tissues of virulent matter.

Some infections are of local and others of a general character and may be communicated by contact, but many contagions are supposed to be transmitted by the atmosphere to the lungs, where the poisonous matter meets the blood, and thereby finds food which it appropriates to its own growth, against the faithful protest of the vital powers.

The power of virus is chemical in its character; so if the vital forces are in a depressed condition, it is most probable the chemical forces will acquire the mastery, although an active strife exists between the two.

No positive knowledge prevails as to the origin of infecting bodies, nor any proofs of distinct characteristics except in the effects manifested.

The venom of the reptile differs from the virus of rabies and variola, and these three again from the Carcinoma of the cancer.

An "*Anti-infectant*" cannot be indicated through the aid of reason until a sufficient quantity of the isolated contagious matter can be procured for the investigation of its properties; so we must content ourselves with the employment of those agents which experiment and observation proclaim most trustworthy.

A "*Disinfectant*" should possess the property of destroying the chemical structure of virus and thereby produce in its stead, a body with *inert* characters, and consequently afford the natural chemical and vital forces an opportunity to pursue their regular vocation, or function of removing effete matter, and replenishing the exhausted tissues, unobstructed.

To convey an intelligent idea of the mode of changing a chemical structure, recourse must be had to illustration and allusion.

If a bottle of water saturated with Chlorine gas be subjected to the action of sunlight, the water will be decomposed, the hydrogen thereof combining with the chlorine to form hydrochloric acid, while the oxygen is set free.

This same change occurs in diffused, but more slowly than in direct light.

The same change also occurs when a saturated solution of chlorine gas in water is put in contact with other bodies where one of the elements of such bodies has an affinity for oxygen.

Now suppose a case of local infection so situated that chlorine water may be applied thereto.

If the infecting virus be a chemical body willing to surrender an equivalent of its hydrogen to the oxygen of the chlorine water, thereby forming water by the combination of said gases, while the chlorine and hydrogen of the chlorine water unite and form hydrochloric acid, then we have produced three new compounds neither of which existed at the outset.

Thus, the virus has parted with one chemical equivalent of its hydrogen, consequently is not the same body as before, and hence has lost the character it previously possessed, while the oxygen has entered into combination with the eliminated hydrogen of the virus, and the chlorine with the hydrogen of the chlorine water, the resulting products being hydrochloric acid, water and transformed virus.

All these newly formed substances are still in contact with the tissues to which the chlorine water was applied, but the question suggests itself, whether these new products are detrimental to the natural processes which should go on in the healthy tissues? If the appropriate agent for the case has been selected, they are not.

Suppose another case of local infection, with the employment of the

same agent, but a difference in chemical structure of the infecting virus. In this case, the virus is unwilling to surrender any of its hydrogen, but has a strong desire for oxygen which the chlorine water yields up to it.

Here the action is different from the former case, and so also are the products, except one, namely, hydrochloric acid.

It may also occur that the product of recombination from the virus and the newly formed hydrochloric acid may combine at the instant of being formed (in the nascent state), and produce a new body, possessing healing qualities.

From the foregoing, one may observe that the baneful influence of the offensive matter is not only removed, but an agent invested with salubrious properties is brought into contact with the previously injured tissues.

It is the nature of virus to appropriate organic tissues to its own growth, under certain temperatures, and in the presence of moisture, which conditions animal bodies supply, and it operates more rapidly in an abundance of light, but its progress is all the time opposed by the vital forces, and should these forces exceed those of the virus, they will prevail, and "vice versa."

The term "Zymotic" is now applied to "epidemic" maladies, and implies fermentable diseases, hence it is inferred that the action of the virus in contagious affections is very similar to that of yeast in the presence of sugar and nitrogenous bodies, so that any substance which alters the constitution of "infectio purulenta", or interrupts its progress by "catalysis" is a *disinfectant*.

Catalysis may be illustrated, in a comprehensive manner, by what occurs in distilleries, where it is desirable to arrest fermentation in the "fermenting tuns," before it reaches the Lactic and Acetic stages.

If a few drops of tallow from a candle in a melted state, be dropped into fermenting "wort," the fermentation immediately ceases, notwithstanding many thousand gallons are acted upon.

It is therefore apparent that one body by its presence may render another one inert, as well as excite to activity.

A catalytic Disinfectant should therefore be a body of strong chemical constitution, while one that acts by transformation should be of feeble structure, and always ready to make an interchange or exchange of one or more of its elements, or disposed to take from, surrender to, or directly combine with, the obnoxious matter that propagates and subsists at the expense of the animal economy. To more fully explain this view it may be mentioned that Chlorine desires a union with Hydrogen, and when the opportunity is afforded, seizes and holds it with considerable force, and thereby becomes an element in a comparatively permanent compound.

In its combinations with the chloroxides, chlorites and chlorates, its constant desire is to yield up the oxygen which is held feebly, and become a chloride by combination with the metal of the base, under slight disturbing influences. The liberated oxygen combines with or eliminates from the virus, in either case inducing a change of structure, and consequently of character.

Sulphites act differently, as they need oxygen to transform them to sulphates, in which condition they become permanent. So it will be seen that the former agents dehydrogenize, and the latter deoxidize.

Sulphurous acid seeks oxygen to transform it to sulphuric acid, and when it attains this stage of oxidation, its appetite for that element is appeased.

Some sulphates act in the same manner from their propensity to become sulphates of peroxides and persulphates.

Iodine, Iodides, Iodites and Iodates, Bromine, Bromides, Bromites, Bromates, and a large class of organic salts are always ready to acquire a more neutral condition, under the circumstances set forth, so that a powerful agent is necessary to disturb that state of repose when once attained.

Many of these bodies, after their transformation, possess an entirely different set of properties, thus: If sulphurous acid becomes sulphuric in contact with animal tissues, it then acquires stimulant, astringent, and in the stomach, tonic properties, if dilute; but at a certain degree of concentration it becomes an escharotic, and if anhydrous is quite inert in the absence of moisture or water, but should water be present or some inorganic salts, it assumes a catalytic action.

It will therefore be observed, that a complication of effect may arise, from the employment of the same agent in different degrees of concentration.

As nearly all putrescent matter is composed of Carbon, Hydrogen, Oxygen and Nitrogen, and in most instances, Sulphur and Phosphorus, any element invested with a powerful affinity for either one of these, when brought into contact therewith, disorganizes the putrid body and it no longer exists.

The disorganizing element may be very poisonous itself, if in a free state, so it is important to combine it with another body to neutralize such influence; but that other body must retain it, with a force so moderate that it may, at all times, be at liberty to leave and combine with any of the above named elements (forming the constituents of a putrid mass), when brought in contact therewith.

To ascertain that "Bromo-Chloralum" exhibited the character of being easily decomposed as just described, it was subjected to analysis, and found to be an aqueous solution of the double Bromide and Chloride of Aluminium with unimportant traces of Iron, Magnesium and Calcium.

The Chlorine and Bromine are chemical elements vested with powerful and wide ranges of affinity, while the Aluminium is of feeble and limited propensities in all its relations, if in aqueous solution.

The Bromine and Chlorine being both volatile and poisonous, in a free state, it is necessary to combine them with some body possessed with only sufficient affinity therefor to detain them and render their transportation, as well as use, safe and convenient, and that will yield them up without reluctance to other elements in putrescent and infected organizations. Such a body is found in Aluminium, or its oxide.

These conclusions were attained by subjecting the Bromo Chloralum to the action of such chemical influences as are well known to exert feeble powers.

The first experiment was made by submitting a portion of the Bromo-Chloralum to distillation in a retort immersed in an oil-bath at a temperature of 265° Fahr.

This comparatively low temperature was sufficient to break up the compound and decompose a portion of the water.

The Hydrogen of the decomposed water united with the Bromine and Chlorine forming Hydrobromic and Hydrochloric Acids which were expelled and passed to the receiver, while the oxygen of said water combined with the Aluminium forming Alumina, and this was left behind in the retort.

Now suppose the Bromine and Chlorine above named, had been combined with Potassium, Sodium, Calcium, Gluncinum, Barium, Strontium, &c., and subjected to the same treatment, it would have also been necessary to use either Sulphuric, Nitric, Phosphoric, Arsenic, or Oxalic acids, to expel them.

In the former case, simple application of the temperature produces the effect; in the latter, a displacing agent of strong power is necessary in addition thereto.

This experiment, however, sustains no relation to the application of the Bromo-Chloralum in securing salutary effects; so the next experiments were conducted to obtain assurance that its equipoise would be disturbed by more mild and ordinary influences.

Some vegetable fibre immersed in Bromo-Chloralum undiluted, for five minutes, then rinsed in water dried and pressed with a hot iron, was found to have its fibrinous structure entirely destroyed, which was known by subjecting the same to slight attrition in the fingers.

Here the structure of the fibre and the chemical constitution of "Bromo-Chloralum" were changed. Starch, Sugar, woody-fibre and many other organic compounds were transformed in like manner, but it was necessary to examine the resulting products to trace the transformations, a description of which would be irksome in its details.

Other and more delicate tests were made by the employment of vegetable colors, a number of which have their chemical structure entirely destroyed by contact with the "Bromo-Chloralum," which became known by the fact that it was impossible to regenerate the original tint by any process of neutralization, and when neutrality was attained, the tinctorial body became changed to one of new hue, or was colorless.

These tests were so delicate and the transformations so marked that the impression was forced upon us that the "Bromo-Chloralum" must be a mixed Hypobromite and Hypochlorite of Aluminium, but a strict chemical examination did not exhibit these characters.

To establish the effectiveness of Bromo-Chloralum as a *deodorizer* and *disinfectant*, putrefaction was induced in pieces of animal fibrine, gelatine and caseine.

Each was placed under an inverted glass jar, upon plates with sufficient water and exposure to sunlight, and a fermentable temperature, to support and accelerate putrefaction after it was induced.

When it was determined that the process of dissolution was thoroughly established, a quantity of "Bromo-Chloralum" was injected in and upon the decaying, or fermenting mass, and the evolution of offensive gases and fermentation ceased at once, or within five minutes.

Animal fibrine, gelatine, caseine, and a vast number of organic substances, are prone to undergo decomposition from the effect of mild influences, when water is present, but in the absence of that fluid and when quite dry, may be kept for an indefinite period entirely without change.

A favorable illustration of this statement may be observed in gelatine, or glue. It is known to keep for years, so long as moisture or water is excluded, but when mixed with that substance to the consistency of a limpid fluid or concentrated syrup, and exposed to ordinary temperatures, is sure to enter into decomposition before the third day thereafter.

This suggests a convenient mode of preparing a putrescent body, with which to test the relative disinfecting powers of "Bromo-Chloralum" or other agents of that class.

In rotten eggs and other animal products, as carrion and the like, where some of the products of decomposition are phosphuretted and sulphuretted hydrogen, phosphohydride, and sulphohydride of ammonium, experiments were made by placing the putrescent masses under the bell glass, tubulated at the top, and supported by wedges on the plate to admit of a free circulation of air. Above the putrefying mass was suspended porous coke which had been previously treated with hot dilute hydrochloric acid, and subsequently washed with hot water, to remove extraneous matter.

This coke was saturated with "Bromo-Chloralum," and the escape of offensive gases from the "tubulaire" (tubular opening) ceased altogether after about two minutes, but fermentation was visible below. Bromo-Chloralum to excess of saturation, was then injected upon the coke, so it might drip upon the decaying body, and after about five minutes, the fermentation ceased, notwithstanding the conditions favorable thereto were maintained. Here three effects were manifested; namely, *deodorizing, disinfection and absorption.*

These experiments were repeated with the substitution of "Pumice Stone" for coke, and with equally favorable results. (Would not Coke or Pumice be available agents for absorption, suspension, distribution and diffusion in Hospitals?)

In all the foregoing experiments, it is more conclusive to work in sunlight, for, as that agent favors decomposition, it also assists disinfection, besides affording a mere perfect observation.

In this connection it seems proper to make an observation upon the method of testing "Bromo-Chloralum" as an absorbent of sulphohydric and phosphohydric acids, sulphohydride and phosphohydride of ammonium.

The proper way is to expose the Bromo-Chloralum in extended surfaces upon Coke, Pumice or cloths, in such a position, in a comparatively close vessel, as to intercept the sulphur compound in its transit, and not by driving sulphuretted hydrogen through it, because it is injected therein by its own pressure as generated, and passes through in bubbles, or spheres, and being of low specific gravity, its flight through the liquid is so rapid, that the opportunity of contact is prevented, except upon the exterior surface of each bubble, or sphere.

We made this mistake ourselves at the outset, and reasoned that a compound of sulphide of aluminium was formed in the first instance, and this was at once decomposed in the presence of water, and the sulphuretted hydrogen reproduced. A more accurate study of the subject showed that the sulphide of aluminium could not be formed in the presence of the water, and the escape of sulphohydric acid was due to its rapid generation, and want of proper contact with the absorbent.

It is well known to chemists that an aqueous solution of sulphide of aluminium cannot exist, as it decomposes water, and is itself immediately decomposed when placed in that menstrum, the products being alumina, and sulphohydric acids, but a mixture of bromide and chloride of aluminium will decompose a certain percentage of sulphohydric, and phosphohydric acids, and their ammonium compounds.

The effort was made to trace the transformations and to assign a reason therefore, representing the changes by equations.

No satisfactory proofs of the order of transitions were adduced, but the inference that the sulphur and phosphorus compounds induced the forma-

tion of an aluminium chloride of alumina, and set the bromine free, seemed justifiable, because *Æther* would take up bromine when the compound which had been acted upon was agitated with it, and a small quantity of starch immersed therein was changed to an orange hue.

The bromide and chloride of aluminium used for these experiments were made chemically pure and as a quantity of sulphur was recovered from the sulphuretted hydrogen acted upon, that compound must have been decomposed to produce it.

Bromide of aluminium is capable of dehydrogenizing sulphuretted and phosphuretted hydrogen, with the deposition of sulphur and phosphorus, and will also dehydrogenize ammonia, with liberation of nitrogen. Chloride of aluminium does not seem to exert this power, but manifests a peculiar behavior toward sulphurous and phosphorous acids, and many copulated volatile compounds.

In all these experiments with sulphur and phosphorus compounds, the amount of effectiveness was estimated by the quantity of recovered Phosphorus or Sulphur, either as elementary bodies, or as Phosphoric and Sulphuric acids to which they were converted.

Experiments demonstrated the fact, that "*Bromo-Chloralum*" is a compound of feeble constitution, consequently is capable of acting by displacement, substitution, mutual decomposition, alteration of molecular structure in, or upon (and in many instances by direct combination with) other substances of like feeble structure.

Hence, I have no hesitation in recommending it as a very efficient agent for arresting putrefaction and as a "deodorizer."

In all cases of "*Purulentia*", "*Bromo-Chloralum*", from the nature of its chemical relations, is entitled to an exalted position as a "disinfectant," and as it is also an absorbent, the title of "anti-infectant" should also be accorded to it.

The next consideration of the *Bromo-Chloralum* is as an antiseptic. This term implies opposition to putrefaction, and as the action of "deodorizing" and "disinfecting" includes the character, it becomes unnecessary to further discuss the relation.

As an "alterative", it is difficult to infer to what extent the "*Bromo-Chloralum*" possesses such properties, without very extended observation, particularly as the term itself is employed in so many senses; but that application of it which is most generally accepted, implies that an alterative is a body capable of inducing salutary effects, without increased secretion or evacuation. As the action by which such effects are secured is not well understood, it is impossible to predicate for, or appoint to, any body such characters, therefore its reputation as an "alterative" must become established through observation.

The relations of the "*Bromo-Chloralum*" as an astringent and styptic, were inferred from its behavior upon freshly drawn blood, and upon a solution of albumen from an egg.

It possesses the power of coagulating albumen, and it may also be judged by its effect upon the membranes of the mouth when tasted, inasmuch as it produces nervous irritation and contractibility of that tissue.

Regarded as a "styptic" no objection to the "*Bromo Chloralum*" can be offered, when the same is employed of full strength for that purpose.

Styptic and astringent are nearly synonymous terms in their general application, but there is this distinction, that an astringent produces contract-

ility of the fibrous tissues by nervous irritation, and the absorption of water, or fats therefrom, while a styptic exerts a similar action, and at the same time coagulates certain compounds contained in the fluids enclosed in the cells of all animal tissues.

The results of my investigation accord both properties to Bromo-Chloralum."

HAYDEN M. BAKER, Chemist,
Industrial Laboratory.

WILLIAMSBURGH, N. Y., Oct. 19, 1872.

DR. H. M. WELLS, U. S. N.,

U. S. Steam Ship "Canandaigua," Key West Squadron.

Dear Sir—Your letter of Sept. 4th, came duly to hand, and has received careful and deliberate consideration.

Prof. A. Fleck, of Germany, originated the article to which your letter alludes, and the American Journals have either copied or made extracts from it, to convey his opinions to the profession and people.

The compound which the Professor investigated was the product of an English Manufacture, and is styled "Chloralum;" while the substance which I examined for you in December last, was the fabrication of an American House, and was then, and is now put forth, under the name of "Bromo-Chloralum."

You will now readily perceive that the subjects presented for discussion and consideration are different chemically; "English Chloralum" and "American Bromo Chloralum."

Undoubtedly, the English firm designed the preparation and sale of an aqueous solution of Chloride of Aluminium in a commercially pure state, and had they used the proper precaution to secure this, it could not be said that their product was detrimental or prejudicial when employed as they directed, even if it were entirely destitute of salubrious properties as stated by the Professor.

From the metals accidentally associated with the English Chloralum, it is but proper to infer that the preparation was manufactured by the mutual decomposition of Sulphate of Alumina and Chloride of Calcium, as it contains the Chlorides of Aluminium, Lead, Copper, Arsenic, Iron and Calcium.

If it had been made by dissolving hydrate of alumina or aluminium from clay in distilled hydro-chloric acid, it is very doubtful if the chloride of lead could have been present.

If made by the mode first presented, it was necessary to employ sulphuric acid for the formation of sulphate of alumina as the first step.

If the commercial acid used was such as is manufactured in England, then one can readily account for the presence of copper, arsenic, lead and iron, because copper pyrites are extensively used for its fabrication in that country, and usually have arsenic and iron associated with them and the acid, being subsequently concentrated in leaden vessels, would dissolve a small portion of lead oxide.

Indeed it is difficult to see why nearly all the uncrystallized chemical compounds, soluble in water, should not contain a percentage of either arsenic or copper, when the English commercial sulphuric acid is employed as an agent or instrument in their formation.

The lead, copper and arsenic associations in "English Chloralum" must be regarded as contaminations, although each of these metals enjoys a position as a remedial agent in the hands of skilled practitioners; but their use is fraught with too much danger for general distribution, or even special administration, when the dispenser is ignorant of their presence.

The German Professor's article sets forth the Chloralum as utterly worthless; but he must have intended to imply that it was so by reason of its associations; for he knows that it has a sphere of usefulness, particularly as an astringent and styptic, when constructed chemically pure from chlorine, aluminium and water.

The want of discreet attention to the fabrication of this preparation has resulted in very severe criticism of the "English Chloralum," although the samples, which were submitted to me for examination, contained very trifling quantities of lead, arsenic and copper.

The "English Chloralum" ought not to be confounded with the "American Bromo-Chloralum," not only from justice to the proprietors of the American preparation, but because of the intrinsic merit of the latter itself.

No reason has yet been presented disproving the impressions acquired by the experiments made for you with "American Bromo Chloralum" last December, which with my conclusions are fully set forth in my letter to you of the eighteenth day of that month.

You will remember that the constitution of "Bromo-Chloralum" was therein represented as a double Bromide and Chloride of Aluminium, in aqueous solution, with slight traces of the chlorides and bromides of magnesium, calcium and iron.

Before your letter came to hand, the article of Prof. Fleck and extracts therefrom were presented to me as not according with my communication to you; but the parties exhibiting these matters had failed to discriminate between the English "Chloralum" and "Bromo-Chloralum." Nevertheless the Professor's expressed opinions presented the possibility of contamination in the American article, and excited a good deal of anxiety, therefore I incurred the inconvenience of a visit to the manufactory of the Bromo-Chloralum in New Lebanon, while on my way home from the West early in September last. I found that the Proprietors had preserved a quantity of each manufacture during the current year, which they kindly offered to me for chemical examination, together with the courtesies of their Laboratory.

A sufficient number of tests for lead, arsenic and copper, were made to satisfy me that the entire quantity manufactured, during this year, was free from those metals, and sustained the inference that all made, since it was established as a manufacture, was equally pure.

A careful and searching inspection of the processes and apparatus employed in the fabrication of the "Bromo-Chloralum" gave abundant evidence that no deleterious substances could be introduced into its constitution, even if they were present in the material, because methods are adopted which should intercept their transit and leave them behind as precipitates; besides, the most thorough precaution is observed at the outset in procuring pure ingredients which are tested before use.

The incidental bromides and chlorides of calcium, magnesium and iron, I do not regard as impurities, but rather as being (in their relative quantities) beneficial and advantageous in the accomplishment of those purposes for which "Bromo-Chloralum" is issued.

I feel convinced that your reputation will not be impaired by the advocacy of the "American Bromo-Chloralum" in those cases where your judgment indicates its use, and am also confident that no injurious results will accrue from its employment.

Please present my compliments to Capt. Thompson and the other officers, and believe me to be

Very Respectfully, your obedient servant,
HAYDN M. BAKER, Chemist.

PEORIA, April 12, 1872.

Messrs. TILDEN & CO., New Lebanon, N. Y.:

Gentlemen.—Before I shall enter the fulfillment of a promise I have made to Mr. Pett, a long time ago, regarding my success in using your Bromo-Chloralum during the Epidemic of Variola from January the 12th, to the present day, 1872, I beg leave to acknowledge the receipt of several letters, and of Xylol, which you had the kindness to forward to me.

Gentlemen, whatever I shall have to say in giving you my experience made with about eighty patients down with Small Pox in our community, I beg you to understand, and all whoever afterwards may hear of my opinion regarding this subject, that it is the result of close observation of such as have been treated when on their sick beds, with the disease; or such as had to fill the position of nurses or were members of the family in which I had the opportunity of making my trials.

Appreciating your production, the Bromo-Chloralum, I consider it first as a Deodorizer, and feel bound to say that it has surpassed my most sanguine expectation, and the expectation of all. The quarters of many of whom I found narrow and oppressive, and who were compelled to live with their sick, inhale over and over again their exhalations both from the respiratory organs, general integuments, and dejections.

I do not hesitate to confess that many a place was an abhorrence the first time to pay a visit to, but no sooner had the party in charge been taught the use of your Deodorizer, than all smell and stench was gone, the nostrils opened and breathing went on as in open air without nausea; sick and well ones testifying to this fact. In the same way the contents of vessels were made inoffensive to the olfactory nerves of such as were called to dispose of them.

Thus the deodorizing quality of the Bromo-Chloralum being proven to one of the several organs, faith in its disinfecting quality and virtue could not fail to be established, the way of argument being a simple one. For what is able to destroy in the atmosphere we inhale, elements communicating an offensive, unwholesome smell, must have the power to destroy in the same way, other agents adverse to health when contained in the air; and this I judge your Bromo-Chloralum is not only calculated to do, but is, in fact, realizing; each and every one of the articles entering by chemical process into union, being a powerful agent in itself, and an effective means in the hand of a physician against ailments and suffering of the human race of serious character, touching the organism not on its surface only, but in its inmost constitution.

What the medical world, up to the new era of your discovery, had in the line of disinfectants, is now justly antiquated, for who would like to

resort to Guyton Morveau fumigations, or even those of Smyth, either of which not only were destructive to contagious agents, but the infected articles at the same time, if particular care and forethought was not taken for the latter. More creditable and less objectionable was Labarraques chlorine, but unlike yours, it is irritating to the nostrils, like carbolic acid, or carbolate of lime.

I freely confess, for sick rooms, I shall henceforth use no other Disinfectant and Deodorizer than your Bromo Chloralum.

So much for it in this respect. Now some words as regards its value as an application or wash in Small Pox. There is no controversy whatever amongst all *my* patients during our last epidemic in regard to its soothing influence, when applied by means of moistened cloths to the face or any part of the burning and itching surface.

Its influence was such, that after the first application had been made, they would be easy, and fall asleep, after nights of discomfort, asking when awake forthwith for renewal of the application. Besides this soothing influence, the eruption came hardly to suppuration; the pustules, at an early period, commenced to exsiccate and the scabs came off in the shortest period imaginable, and what in almost every case I am able to exhibit, is—no pitting is traceable in any of the faces having been thus protected against the combined influences of light and air. My honored colleagues, Doctors Robert Roskaten and George Lucas, who on my recommendation have made experiments with cases in their charge, testifying to the same effect.

I have even used it as a prophylactic for my own person, and advised my friends to follow my example, by taking from 10 to 15 drops, four times a day, diluted with sweetened water and brandy, a tablespoonful each. But its charming influence did not end with its application to the face or as a means of bathing the external surface where it was applied in proportion of 1 to 10 parts. I directed its use also as a wash both for the nostrils and fauces, wherever by copious eruption the passages had become impaired. In every case its application has been successful, in these cases its strength (original) was reduced by 15 or 20 parts of water added.

Having thus far given you my observations concerning the results of Bromo-Chloralum in cases of Small Pox, under my care, I feel bound to add some words in regard to Xylol as a means of treating this disease with decided success. I am indebted for its knowledge to a *Daily* in which its use was reported in the clinic of the Charity Hospital in the City of Berlin, where Doctor and Professor Wm. Zuilger during the last Epidemic there achieved the best results. In imitation of him, I exhibited it in doses of 10 to 15 drops for adults, and 3 to 5 drops for children, every 2 or 3 hours, as need might be, and covered its taste in an emulsion made of Pulverized Salep, one scruple to a four or six ounce mixture, made pleasant for the palate by adding flavor and suitable syrup.

In my judgment all cases from the time I had received it by the kindness of Messrs. Tilden & Co., were just half as short in their duration as before I was in possession thereof. Of course I should not forget to mention that during the earlier stages of the disease, the bowels were a particular object of attention, the inactivity of which was prompted by Electuarium of Senna, whilst at a later period when the scales had come off, gentle diuretic and diaphoretic means were resorted to.

With the assistance of these means the mortality ratio of 16 to 110 or 115, as were under treatment all over the wards infected, is a very favor-

able one, and I consider it to a great extent due to the agents obtained from Messrs. Tilden & Co., to whom I here-by express my heartfelt thanks.

DR. J. N. NIGLAS, Health Officer.

PEEKSKILL, August 10th, 1871.

Gentlemen.—The package of *Bromo Chloralum* which you favored me with some time ago, has been carefully used by myself, and some of my medical friends, with the following results:

1. *As a certain, perfect and prompt deodorizer*, it is far superior to any article of the kind we have ever employed, not excepting carbolic acid. The most noisome and disagreeable odors are instantly destroyed by its application; while itself leaves no unpleasant smell behind. I find that a solution, made by adding one part to 20 of water, placed in sinks, water-closets, sewers, cesspools, &c., immediately removes all unpleasant smell.

2. *As a disinfectant* I have used it successfully in *typhoid fever* and other infectious diseases. I have no doubt it is destined to take the precedence of chloride of lime, zinc, soda, carbolic acid, the poisonous mineral salts, and all other agents hitherto introduced for this purpose. The experience of my medical friends, also, coincides with my own on this point. One great advantage it possesses over all other agents I have ever used is, that its inhalation causes no feeling of irritation in the air-passages and lungs. It is not only safe and non-poisonous, but absolutely free from all disagreeable effects whatever.

3. *As a general deodorizer and disinfectant* for all manufactories where decomposing animal or vegetable materials are used, it must prove invaluable—also as a *Sanitary agent* for Boards of Health, in our large towns and cities, who will, I believe, find it both more efficient as well as more economical, than most other articles hitherto employed.

4. *FOR HOSPITAL USE*, also, I think it must prove very useful for various purposes; among others as a wash for offensive sores and ulcers, sloughing gangrene, cancers, and offensive discharges of all kinds; also for disinfecting clothes and bed-clothing, bedding, and for general deodorant and disinfecting purposes.

5. Regarding then the *BROMO-CHLORALUM* as altogether the most valuable article of the kind hitherto introduced into practical medicine and hygiene, I most cheerfully and confidently recommend its use to the profession and the public.

CHAS. A. LEE, M. D.,

Professor of Hygiene and Materia Medica.

The following is taken from a work on *Asiatic Cholera*, written by Dr. L. P. Brockett:

"In Cholera, yellow fever, and other contagious diseases, the use of "*Bromo-Chloralum*" in all the vessels before they are required, the application of cloths dipped in a diluted preparation of it, around the bed and suspended in the room, will effectually remove the possibility of contagion. The floors, walls, carpets and furniture may be sprinkled with it freely, without injury; and all the privies, vaults, kitchens and pantries, should be fully disinfected by it. In tenement houses, meat and fish markets, vegetable markets and green groceries, and in the neglected streets of our great cities, it will be found invaluable. With a good supply of it on

hand, and thoroughly distributed, most of our towns in the Mississippi valley, may successfully combat the inroads of either CHOLERA OR YELLOW FEVER. These statements are not mere theories based on the abstract knowledge of the disinfecting power of Bromine and Chlorine, but the results of its subjection to the severest tests by men whose authority in all these matters is indisputable. On any question of Hygiene, no name in this country stands higher than that of Dr. Charles A. Lee, a professor, and an author of several able works, on the subject of Hygiene and Materia Medica, and after subjecting it to the most rigid tests in a variety of ways, Dr. Lee says, 'Regarding the "Bromo-Chloralum" as altogether the most valuable article of the kind hitherto introduced into practical medicine and hygiene, I most cheerfully and confidently recommend its use to the profession and the public.' Our own observation of its effects, leads us to endorse the Doctor's opinion most heartily."

MISCELLANEOUS TESTIMONIALS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., Oct. 17, 1871.

GENTLEMEN.—An experiment with your new Disinfectant, Bromo-Chloralum, was made yesterday, and more than confirmed my previous impression of the great value of this article for general use in large Public Buildings.

We took *three* pints of the Bromo-Chloralum, adding *three* gallons of water, this dilution was applied in one of the rooms of this Building, having five urinals, and the same number of water-closets. The odor from this room was such as to be noticeable outside in the hall, and inside, was always very disagreeable in spite of all proper means of ventilation, etc.

I witnessed the first application of the disinfectant, and with others present, expressed my surprise at the almost magical results obtained in less than five minutes, and within thirty minutes, on going out and coming back, could not detect any of the foul odor, and the atmosphere was pronounced as sweet and pure as the office rooms.

I cheerfully recommend the use of this article to officers of Public Buildings generally.

AUG'S JORDAN,
Chief Engineer, Post Office Building.

EDITORIAL OFFICE CHICAGO MEDICAL JOURNAL, 503
MICHIGAN AVENUE.

DR. J. ADAMS ALLEN, Editor and Proprietor.

CHICAGO, Nov. 24, 1871.

GENTS—I take pleasure in commending, after frequent observations of its effects, your preparation of "Bromo Chloralum" as an exceedingly efficient and pleasant disinfectant and deodorizing agent.

It is entirely devoid of odor or of irritant effects, so that it can be freely used in residences, hotels, etc., at the same time it is very useful as a local application in many cases of wounds, etc., when, from causes readily appreciated by physicians, the solution of Carbolic Acid proves injurious.

I remain with high respect, yours, etc.,

J. ADAMS ALLEN, M. D.

[COPY]

CITY CLERK'S OFFICE, Rochester, N. Y., Sept. 30, 1871.
In Board of Health, Sept. 29, 1871.

By COMMISSIONER AIKENHEAD:

RESOLVED, That having tested and tried the Bromo-Chloralum, non-poisonous disinfectant, and this Board being satisfied of its utility as a disinfecting agent, do hereby recommend the health inspectors to use, and recommend the same to those having occasion to purify any offensive, poisonous or noxious odors and gases, in and about any dwellings, barns, stables, drains, kitchens, cellars, water-closets, &c. The foregoing is a true copy from the minutes. [SEAL] WM. F. MORRISON, *City Clerk*.

MOBILE, Ala., Feb. 18, 1872.

This is to certify that the "Bromo-Chloralum" is of the most valuable aid in our dissecting rooms, as a "Disinfectant."

All our students who have used it, were highly delighted with the same; for if applied to their hands *diluted*, it cleansed them perfectly.

JOSEPH H. SCOTT, Janitor, Ala. Medical College.

CHICAGO, February 26, 1872.

Gentlemen.—We take pleasure in forwarding to you the following extract from the minutes of the meeting of the CHICAGO ACADEMY OF MEDICINE, held February 19th, 1872.

"The committee appointed to test the samples of "Bromo-Chloralum," (kindly furnished by your agent, Mr. A. M. Pett,) reported that they had tried the article in dissecting room, and also in the hospital, with gratifying success, and offered the following, which was adopted:

"Resolved, That the CHICAGO ACADEMY OF MEDICINE endorse the Bromo-Chloralum, and recommend it as an efficient and reliable disinfectant and deodorizer."

W. DANFORTH, M. D., President.

E. A. BALLARD, M. D., Treasurer.

HEALTH OFFICE, Louisville, Ky., June 6, 1872.

"Bromo-Chloralum," as a deodorizer, has no equal. Will let you know at some future time, as to its disinfecting properties.

Am under great obligation for specimen samples sent me.

Truly, etc.,

SAMUEL MANLEY, Health Officer, Louisville, Ky.

OFFICE OF THE COMMISSIONER OF PUBLIC SCHOOLS,
BALTIMORE, June 5, 1872.

Messrs. TILDEN & CO.:

GENTLEMEN.—I take pleasure in certifying to the great value of Bromo-Chloralum as a Deodorizer and Disinfectant. I have used it in the Public School Rooms of our city, and in sick rooms where the patient was suffering from Small Pox, with very gratifying results. ALL offensive odors are removed by its use. As a styptic, I prefer it to persulphate of iron. Its decided superiority over all other Disinfectants consists in the certainty of its action, and from its being inodorous and non-poisonous.

I am, Gentlemen, very respectfully, your obedient servant,

A. W. DODGE, M. D.

HEALTH OFFICE, OLD CITY HALL,
BALTIMORE, May 24, 1872.

Messrs. TILDEN & CO.:

We gave the Superintendent of one of the City Dumps, a pint bottle of the BROMO, and instructed him to use it on a night cart that had been in immediate use, and to select one that was most offensive; he did so, and asserted that after the application of the Bromo, he could insert his head into the trap of the cart without any inconvenience or discomfort as far as his olfactories were concerned.

Yours with regard,

GEO. W. BENSON, M. D.,
Commissioner of Health.

FULTON FISH MARKET, NEW YORK, July 17, 1871.

Messrs. TILDEN & CO.:

GENTLEMEN—We take pleasure in acknowledging the success of your experiment, yesterday, in deodorizing this market by the use of your "Bromo-Chloralum." The small quantity of the article employed, was largely diluted, and yet in a few minutes, after sprinkling the floors, all foetid odors were destroyed.

At three o'clock this morning an officer of the company was here to test the condition at the opening of the market, and *found the premises free from all bad smells, a condition never before presented during the war... season.*

Yours, respectfully,

W. P. CLARK,
A. C. ROGERS,
Executive Committee.

For Fulton Fish Mongers Association.

BROMO-CHLORALUM !

Manufacture only by

Tilden & Co.,

Manufacturing Pharmacutists and Chemists,

NEW LEBANON, N. Y.,

AND

176 William St., New York City.

FOR SALE BY ALL DRUGGISTS.



